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ABSTRACT

The specific problem conceptualized for this position paper was that of deriving inferences from statistical data which permitted some determination of the probable effects of recent federal policies and programs on the career options of black women, and, along with other relevant data, to develop a set of recommendations concerning the types of policies and programs which best aid black women in using and improving their career options. In addition, three issues (competent education, traditional female roles, conflicting minorities) are examined as they relate to the current efforts to aid black women. Myths and realities about occupational, familial, and educational statuses of black women are discussed in detail. Employment outlooks for 17 occupations through the mid-1980's are discussed. Career options for black women and the National Institute of Education (NIE) role are examined; recommendations are made which focus on the major concerns and strategies of the Education and Work Section of NIE as they relate to black women. It is concluded from statistical data that federal policies and programs had insignificant, weak, or moderate impacts on career options for black women. It is also noted that the survey of related data tended to confirm the general paucity of empirical data about the relationship between schooling, family, work, and income for black women, thereby leading to the overriding recommendation for a massive research undertaking of this type. Tables are included for 1974-75 predictions of training and other qualifications, and employment outlooks for selected occupations (66 pages). (TA)

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CAREER OPTIONS FOR BLACK WOMEN

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Prepared for the Education and Work Section of the National Institute of Education

PREFACE

The 1960's and the 1970's have been pregnant with various policies and programs for social intervention. Many of those policies and programs were specifically aimed toward the goal of upgrading the socioeconomic statuses of black women. However, most of those policies and programs have yet to give birth to significant upgrading of the statuses of black women.

One complication has been the general dearth of knowledge and understanding about the crucial relationships between the variables of family background, schooling, work, and income as they relate to black women. In addition, the effects of race and sex which linger even when appropriate controls are established for family background, schooling, work, and income are often overlooked. Some have claimed that black women have been most favored by the social intervention policies and programs of the 1960's and the 1970's, in that they benefitted by being both black and female. Sadly, however, the data rarely support those assumptions. Others have claimed that the relative position of black women in the educational and labor markets, in comparison with their other major race-sex groups, has generally remained constant. The proponents of the latter group are often more nearly correct on the basis of available data.

The Education and Work Section of the National Institute of Education is interested in determining the type of role it might play in fostering greater career options for black women, which, presumably, which contribute toward the upgrading of the individual and collective statuses of black women.

That Section is particularly interested in determining the leads and cues which can be culled from existing literature, or from other sources, which may be helpful in charting goals and strategies for the improvement of career options for black women. One of the problems, of course, is the determination of the emphasis or weight which should be placed upon education as it relates to subsequent career patterns. Another problem is the amount of emphasis which could be placed upon family background as an antecedent to schooling and occupational achievement. A third problem is the definition itself of career education or of career options, a problem which is partially confused by the Federal tendency to create overlapping agencies, and to avoid encroachment upon certain obligations designated to the States.

There are many other problems, of course, but the most serious problem is the need for the Education and Work Section of the National Institute of Education to seek highly valid and reliable models about the aforementioned variable relationships, so that the policies and programs which it may develop and implement in the future will have a sound basis.

Consequently, although a variety of information is examined and discussed within this monograph, the major recommendations center upon needed research, which should be undertaken by the best students of social stratification within the United States. The best models for undertaking such research fall within the tradition established by Peter Blau, Otis and Beverly Duncan, William Sewell, and their associates.

Such a comprehensive and national study is urgently needed, so as to reduce the current growing pains being experienced by those who seek to aid black women.

Some individuals may well disagree with the recommendation, on the premise that the needs of black women are too urgent to await additional research. However, I hope that those who are seriously concerned about improved educational, occupational, and income statuses for black women now and in the future will recognize and support fully the need for the establishment of a sound data base, from which appropriate models can be derived, and which, in turn, will aid in the setting of solid polices and programs in the future for black women.

-- Jacquelyne Johnson Jackson
April, 1976

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CHAPTER ONE

INTRODUCTION

Interest in enhancing career options for black women, as well as the efficacious use of those options by black women, has accelerated over the past decade. The reasons for this acceleration are many. In general, it is safe to assume that those reasons are related to efforts to reduce the overall dependency ratio within our society. They are also related to efforts to foster racial or sexual equality within the marketplace. More specifically, those reasons are related to growing concerns about the personal and social consequences of such trends among black women as their numerical growth in or increased rates of unemployment, illegitimacy, and family headships. Included within the latter instance is their heightened representation among family heads who are not within the labor force, or who continue to preside over families living in poverty. Needless to say, such trends as these have been generated by many variables, including the widening demographic heterogeneity of black women, their increasing longevity, their decreasing proportion of married women living with their spouses, and their increasing female excessiveness within their race-specific marital pool.

Concomitant phenomena also include the decreasing value of a secondary education as a factor promoting their entry into the labor force or equipping them more adequately for adult living. As an example, a significantly larger percentage of black women who have completed high school only are likely to be officially unemployed than was true several or more decades ago. An increasing number of high school graduates of both sexes and all colors are less likely to possess basic skills in reading and mathematics than was true earlier as well. Further, the greater rapidity of social change, such as that exhibited by the growing complexity of application forms for employment and various other benefits, has been accompanied by an increased proportion of high school graduates unable to cope successfully with these types of requirements. Other concomitant phenomena include the disproportionately larger increases in the labor supply (as opposed to the labor demand), due partially to the entry into the United States labor force of an increasing number of legal and illegal aliens, as well as the reentry of previously retired senior citizens. The impacts of events arising out of these concomitant phenomena upon the employment opportunities for native citizens of the United States (and particularly for the younger ones) need to be subjected to critical examination by those concerned about career options for black women born within the United States now and in the foreseeable future.

The aforementioned interest in accelerating career options for black women has also been accompanied by a relatively widespread belief that black women have benefitted tremendously from the various Federal policies and programs of the 1960's and 1970's whose primary intents were those of fostering the equality of educational, occupational, employment, and income results for minorities. Unfortunately, insufficient evaluation of these Federal policies and programs occurred. Therefore, although impressionistic judgments abound, there is little substantive evidence which will permit valid and reliable evaluations of the results of those Federal policies and programs upon black women as a categorical group.

However, it does seem apparent that the relative socioeconomic status of black women, in comparison with the statuses of black men and white women and men, remained generally unchanged over the past decade. A logical extension of that generalization leads to the imputation that Federal efforts to improve the career options of and the use of those options by black women as a categorical group over the past decade were less effective than they might have been. That is, they were perhaps less effective than they might have been due to the complications in policies and programs which arose from conflicts in competitive ideologies and priorities. Those efforts were also hampered by fragmentation, indecisiveness, and personal and group prejudices of varying kinds. Yet, to be fair, many of those Federal effots were certainly characterized by sincere intents, and some individual successes were clearly generated.*

A number of those Federal efforts demonstrated clearly that some black women are positively motivated toward upward vertical mobility in their employment and occupational patterns. These efforts also demonstrated clearly that other black women were negatively motivated toward vertical mobility. That is, some women were sagacious in selecting and using career options. Others were not. Their differential patterns in selecting and using career options have led to many intriguing questions, such as those about the interactional effects of specific individual and situational events predicting successful outcomes in career patterns of black women. They have also aided in raising questions about the types of Federal policies and programs which are most likely to provide viable career options for black women in the future.

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*For one such example of an individual success story of a black woman who was aided by Federal policies and programs, see Appendix A.

As an instance, Ella Kelly of the National Institute of Education (NIE) has been especially concerned about the need for a more focused Federal approach to the problems of providing improved career options for a wider range of black women in the years ahead. Her field experiences have led her to formulate some very concrete questions about black women and career options. She has wondered why some black women who could be objectively categorized as desirable participants in particular training programs readily available to them within their metropolitan environments refuse to participate in such programs even though they are aware of the programs and know that the programs could lead to better opportunities for themselves and their family members, whereas other women, similar to them in background, readily participate. She has also wondered if Federally sponsored training programs likely to lead to direct employment have a greater probability of placing black women in jobs if the training is racially segregated or integrated. Kelly has speculated about the most effective ways for spreading program awareness to potential female participants in different geographical settings. For example, what is the best mix of publication within the mass media and personal contact? Finally, she has been concerned about the role of the National Institute of Education, as a Federal agency, in helping to maximize career options for black women now and in the near future.

PURPOSE AND SCOPE

This position paper is a direct outgrowth of Kelly's concerns about the appropriate role of the National Institute of Education in the general and specific Federal problem of enhancing career options for black women over the next several decades. As such, it has three primary purposes: (1) the conceptualization of a problem related to career options for black women; (2) the provision of background information related to that problem; and (3) the provision of a set of recommendations which could be acted upon by the National Institute of Education, separately or in concert with other Federal agencies, in helping to resolve that problem. The scope of the paper is generally restricted to black women between the ages of 16 and 54 years, but data about their black and white male and white female counterparts are often drawn upon for comparative purposes.

The position paper itself, which was also limited by the fragmented and inconclusive status of relevant studies within the available literature, is based upon various types of resources. They include personal observations made over the years as a black woman actively employed within the full-time professional labor force. Statistical data, frequently in raw form, were drawn largely from the United States Department of Labor and the United States Bureau of the Census publications, primarily since 1972. Additional observations were obtained from meetings (primarily of women) which focused fully or partially upon women and work, as well as from indirect observations of programs designed to promote career options, and from observations of others whose knowledge of black women, the world of work, and bureaucracies was significantly above average.

The term career options, for which there is no universally accepted definition, is used within this paper to refer to formal educational training and on-the-job training where the major objective is that of preparing women to function adequately within their probable or actual roles as (a) workers, (b) primary individuals, (c) household or family heads, and (d) wives and mothers. This definition of the concept of career options recognizes that most women will function in varied role-sets simultaneously or over time. It also underscores the necessity for the type of training which helps women to learn to function effectively in these complementary role-sets, and, more important, it focuses upon the need for redefinition of these various roles, wherever necessary, to reduce their conflicts, thus increasing their compatibility.

This is not the traditional position paper for a number of different reasons. It does not represent the outcome of an exhaustive study of all of the theoretical and empirical data related to career options for black women in the United States. It is not based on a systematic field study of the various programs providing career options for black women within the United States. Various factors, such as financial and temporal considerations, as well as the lack of relevant data, prohibited this type of pursuit.

It is also not traditional inasmuch as it occasionally sets forth certain position statements without simultaneously setting forth alternative explanations within the realm of Sociology or Psychology. It also follows a similar tack with respect to controversial issues within the realm of American society. For example, some individuals take the position that higher priority should be given to determining the underlying motivations for women who seek entry into the labor force. Are they motivated to seek work for self-actualizing purposes? Or are they motivated to seek work for reasons of economic necessity? Presumably, then, following determinations of motivations for seeking work, greater efforts would be made to employ women who seek to work out of economic necessity than out of self-actualizing factors. This author, however, takes the position that greater priority should be placed upon the provision of jobs for women who have not yet reached the traditional retirement age in the United States who wish to work, whether their primary motivation is for economic necessity, self-actualization, or an admixture of both. Further, the tendency to concentrate upon the movitations enducing women under retirement age to seek gainful employment within the labor force is itself sexist.

Or, as another example, some persons are quite convinced that a reasonable explanation for shortfalls in the higher development of educational and occupational careers for black women is linked to early childbearing patterns. It is often assumed under this viewpoint that schooling benefits should be made more persuasive to young black women so that they will postpone childbearing until they have received better preparation for adulthood. However, this author takes the position that the evidence for early childbearing as the causal variable in restricting significantly educational and occupational careers among black women is yet flimsy. In fact, early childbearing may more nearly be viewed as an intervening variable which has been made to appear as if it were the causal variable in the chain of events of educational and occupational career progression. Few, of course, have examined the extent to which late childbearing among professionally employed women, as an example, has negative consequences upon their career progressions.

Finally, this is also not the traditional position paper in that the author admits at the outset the influence of objective and subjective factors affecting the selection of the problem, the background information, and the recommendations. Some of the issues which are raised within this position paper, such as that about conflicting minorities, are issues which too many persons have attempted to ignore, as if merely ignoring them will make them disappear. However, in the next several decades, many employers, including the Federal Government, will have to come to grips with issues already emerging from affirmative action policies. Consider, for example, the case of two female applicants for a single job opening who are similar by age, race, health, number and age of children, personality characteristics, and educational and occupational training and experiences, and who are dissimilar in that the husband of one earns approximately $25,000 more annually than the other. Which should be employed and why? Or, to make it easier, consider the case now where a disproportionately larger number of the wives of professors at the predominantly white universities have been recruited for doctoral training than has been true of equally qualified women without such husbands!

In any case, the overriding conclusion of this position paper about career options for black women is the need for a national policy which, with adequate implementation and enforcement, will lead to a plummeting of the present trends of little relative change in their occupational, employment, and income patterns in comparison with their non-black and non-female counterparts. The specific recommendations set forth for the National Institute of Education focus largely upon roles involving research and evaluation necessary for developing, monitoring, and modifying policies related to career options for black women.

CHAPTER TWO

CONCEPTUALIZATION OF THE PROBLEM

This chapter is concerned with the first primary purpose of this work: the conceptualization of the problem related to the career options of black women, with emphasis upon a problem which can be appropriately reduced by actions of the National Institute of Education. This conceptualization is approached in two different, but related ways. First of all, the overall conceptualization of the problem guiding this work is set forth. Then, concentration is placed upon specific issues or concerns which surround that problem. In some instances, those issues or concerns are set forth in a relatively objective manner, in other instances, in a subjective manner, reflecting, no doubt, the author's sharing of certain ambivalences about the definitions of issues and their resolutions with the members of the contemporary American society.

THE PROBLEM

While racial and sexual discrimination have obviously affected the career options of black women, and will continue to do so within the foreseeable future, it is insufficient to take any simplistic viewpoint of black women by merely emphasizing anew the obvious effects of race and sex. It is also insufficient to continue to point out the differential impacts of such variables as socioeconomic status (e.g., mother's educational level) or peer group influence (e.g., tendencies of college students to select institutions attended by their friends). What is eventually needed, assuming the further development of theoretical and methodological prerequisites, is a highly sophisticated analysis of the sum total of causal factors affecting specific black female subsets in particular ways. Thus, the overriding problem is one of setting long-range basic and evaluative research goals to help in unraveling the mass of causal variables determining the selection, use, and benefits of various career options for black female subsets. Presently, the National Institute of Education could contribute toward the reaching of that long-range goal by encouraging research in that direction.

The specific problem conceptualized for this position paper was that of deriving inferences from statistical data which permitted some determination of the probable effects of recent Federal polices and programs upon the career options of black women, and, along with other relevant data, to develop a set of recommendations which, when acted upon, would be helpful in furthering our knowledge and understanding of the types of policies and programs which best aid black women in utilizing and improving their career options. In addition, a secondary problem was that of looking at some issues which are intertwined with current efforts to aid black women.

SOME BIASES, SOME ISSUES

The very complexity of the emergent issues which affect present and future career options of black women makes it difficult to isolate a limited number of those issues. Yet, three important issues shall be singled out.

They are those of (1) competent education, (2) traditional female roles, and (3) conflicting minorities. They constitute the most overwhelming issues presently or allegedly affecting career options for black women today. Surrounded by conflict and contradiction, the satisfactory resolution of each of these three issues requires substantive social changes which will be simultaneously advantageous and disadvantageous for different social groups.

Competent education. Efforts toward public school desegregation over the past twenty years were highly effective in divergent directions. Most important, those efforts aided in revealing the fallacies of "separate, but equal," as set forth in the 1896 Plessy v. Ferguson decision. They showed clearly the overall discrepancies in the quality of education available for those who were black and non-black under dual educational systems. They also prompted some emphasis upon compensatory education. The thrust toward compensatory education to facilitiate smooth desegregation is interesting, inasmuch as one should be able to presume that educational desegregation and compensatory events are different events. Yet, the passage of such acts as the Emergency School Aid Program and the Emergency School Aid Act, both of which place a disproportionately higher emphasis upon compensatory than desegregatory education, suggest that competent education for blacks assumed greater significance only when it was felt that the lack of competent education for them could adversely affect the education of non-blacks.

In addition, the resulting confusion of desegregatory education and quality education increased dissension between various civil rights leaders and organizations, and, indeed, as in the case of the Atlanta chapter and the national office of the National Association for the Advancement of Colored People, increased intra-group dissension. The problems were many, but one significant one was the conflict over admissions or suppressions of the actual quality of the education received by blacks. Many straw men were set up, such as the inability of black children to learn from non-black teachers, or, concomitant with that straw man, the need for effective black models within the educational environment for black students.

Further, the problem became complicated by the Federal stress upon narrowing racial gaps in educational achievement, as measured only by the quantity (and not the quality) of completed formal education. The other intertwining issues were many, including that of the supposition of culturally biased tests, disfavorably slanted toward blacks. But the compelling issue was that of the possibility of racial differences in innate intelligence, as raised by Jensen (1969) and the raging controversies which followed. Jencks' (1972) sobering examination of relationships between education, occupation, and income was also important. None of the complementary or contradictory issues contained within such works as those have yet received any sufficient discussion or exploration as they relate specifically to their implications for career options for black women.

Published debates upon these issues, however, are too well-known to reiterate here, with one exception. This author believes that the nature-nurture issue related to racial differences in intelligence, et cetera, cannot be examined empirically until such a time as the society itself becomes free of racial prejudices and discrimination. Very often, sociologists and other researchers provided purported racial comparisons where the variable of socioeconomic status has been held constant. Therefore, for example, they determine that even when socioeconomic status is held constant, the black mean intelligence score is lower than that of white. The inherent difficulty is that socioeconomic status within the United States is a decided function of not just education, income, and occupation, but also that of race. Consequently, if race is a determinant of socioeconomic status, then comparisons between different racial groups cannot be made when socioeconomic status is held constant, inasmuch as socioeconomic status cannot be held constant if racial variations exist. This does not mean, however, that racial comparisons are entirely inappropriate for other purposes. For example, racial comparisons are particularly useful in measuring racial discrimination if one makes the necessary assumption that the distribution of demographic variables, such as those of education and income, would show little variance in native-born populations of various colors and of long duration within a national boundary.

A considerable amount of energy has also been wasted upon the issue of the presumed educational superiority of black women over black men, without a full realization of the "nothingness" of those comparisons. In truth, and with specific reference to the utility-value of education for labor force participation, black female educational training has been and remains inferior to that of black males, for any number of different reasons /see, e.g., Jackson (1973) for a fuller explanation/.

But the emphasis is only displaced when those types of issues are permitted to obscure the real issue of the quality of education received by black women during their formative years within the educational system. Therefore, it becomes necessary to ask critically about the value of elementary and secondary education for black females, and to seek to find educational models which are more appropriate fits for the necessary or desired educational outcomes. It also becomes necessary, then, to examine carefully the failures of the current educational systems, which may well require such extreme measures as correlating educational achievement scores of black female students with the intelligence quotients of their teachers, _et cetera_. In short, adequate educational revamping of the curricula and of the trainers is needed. Quality education must be developed on the basis of the needs of the specific individuals and of the society in which they are apt to live out their lives as adults.

Therefore, this author would concur with the types of analyses made, among others, by Dale Parnell, formerly State Superintendent of Education for Oregon, and currently Chancellor, San Diego (California) Unified Community College System. Parnell believes that educational accountability within elementary and secondary education is an achievable goal which must, in part, be based upon the awarding of secondary certificates only if students have passed well-constructed and relevant competency-based examinations. Pragmatic aspects of the educational training would help to ensure comprehensive determination of "Education for what?" Individuals completing a high school education would then be in possession of the basic reading, writing, and arithmetical skills, or would be functional literates. They would be familiar with the types of skills necessary to function effectively within this society, such as those skills which are needed to apply for and maintain employment. They would have some understanding of the basic citizenship skills. They would certainly have had an exposure to occupational counseling and guidance sufficient to permit them to exercise wise choices in developing their careers, and in understanding the "career-locking" process which typically occurs at each stage of development.

Hence, the issue of competent education should not be confused with the intertwining issues related to educational desegregation. Competent education must be examined carefully in terms of the basic requirements for all individuals within the school-age population, including those of young black females. It must be developed in terms of accountability being a special responsibility of the educational system, and with a shift from current Federal sup;ort for education being primarily a function of direct contact with a multitude of local educational agencies, toward that of either Federal block grants for education to the States, or the development of a Federal system of elementary and secondary education.

A viable system of competent education may also require hard-nose choices between types of programs and specific age-groupings who will receive greater concentrations of attention and monies. For example, evaluations of Project Head Start may well reveal that the discontinuation of that project is feasible if it leads toward the development of public educational systems opened to all children within their early years of childhood development. Or, conversely, it could be that such evaluations may show that the continuation of Head Start is most feasible if it confined its students to persons between early infancy and three years of age. In any case, some determination of the areas in which such programs as Head Start could be most effective in enhancing the educational development of students should include an evaluation of the methods which are most effective in working with parents to aid them in socializing their female children for traditional and non-traditional educational and occupational roles.

Competent education for black women, then, should be education which is utilitarian in nature and scope, and which will be effective in meeting their needs, and thorough in providing the training required for further occupational development. Such education should not engage in subterfuges, such as that of training secretaries by omitting necessary training in Standard English, either as a first or second language. It should not emphasize training for robots or surplus persons. It should emphasize cognitive and affective training helpful in moving individuals through life as adult citizens on an independent and interdependent, but not a dependent, basis.

Traditional female roles. A difficulty with traditional discussions of traditional female roles is the typical failure of discussant participants to recognize the constant existence of deviations from group centralities, deviations which have even been constant among white women over time within the United States. Those who fail to recognize these constant deviations commit the fallacy of mistaking recent changes as changes of kind, and not of degree. For example, the traditional female role, both for blacks and whites, throughout this century has not been that of a non-working individual. It has been that of a working individual. Some individuals worked within the labor force, others only within the house force as domestic engineers, and some within both the labor and the house forces.

Many persons, of course, forget that the major advances in household technology are quite recent, perhaps because they wish to suppress memories of wasy-day and boiling black iron pots, or ironing-day and heating irons on wood and coal stoves, or quilting day, *und so weiter*. Also often suppressed are recollections of food-raising and food-processing occurring within the home. It is indeed difficult for many of us to remember that the United States was a predominantly rural society, where "a man's work was from sun-up to sun-down, but a woman's work was never done," only a few short decades ago.

There has also been non traditional female role *per se* within the American normative structure. There have been, however, specific traditional female roles related more nearly to class membership within various systems of social stratification. The overlapping similarity within the prescribed norms for women as wives and mothers within the respective upper classes of the black and white stratificational system was and remains generally much greater than that between those for women within the upper and remaining classes in each of the respective stratificational systems. Even within particular social classes, some disparity existed in terms of female expections or expectations for females. There has been an increase in the number and percentage of families within the black and white middle classes who socialized their daughters to pursue top-level professional occupations, for example, which represents a difference of degree and not of kind.

There have also been shifts over time in normative prescrptions about traditional female and male occupational roles. For example, in the latter part of the previous century, the majority of black school teachers were and were expected to be males. Later normative and behavioral shifts helped redefine the role of elementary school teacher as "woman's work." But more recent shifts, correlated both with the military draft exemptions provided for male elementary school teachers during the Viet Nam War and the continuing need to expand job opportunities for males, have tended to delete sex linkages with that role.

Any examination of traditional female roles within the world of work for black women must be based upon analyses on the individual, group, and societsl level within the labor, the house, and the labor/house forces. Generally, throughout at least this century in rural areas, black women were expected to work as a part of their familial constellation within the "family's job." As an instance, sharecropping families (and _not_ sharecropping individuals) were hired. While the family head was responsible for fulfilling the sharecropping contractual obligations, the entire familial constellation, regardless of its specific composition, was expected to assist in the task. Thus, the pattern of family occupation as opposed to individual occupation was the typical _modus operandus_. Also within these rural societies, where much of the family support was generated through a quasi-self contained economic family unit, both women and men worked at home, with some sexual division of labor, as in the case of men being expected to butcher hogs and cattle, and women more nearly to kill chickens.

Many rural black families experienced bimodal occupational patterns in that the males retained their occupational roles on their farms and also obtained paid employment off their farms, sometones on the farms of others, sometimes in nearby factories, and in various other industrial settings. The women within those families often experienced bimodal occupational patterns as well, except that their second occupation most frequently involved paid employment conducted within their homes. For example, many such women "took in washing and ironing."

The major norm of overall family support as a responsibility shared by women and men continued within urban settings, but with some modifications, most of which have already been well described for blacks in the works of Du Bois (1899) and Frazier (1939). Most often, within husband-wife families, the sexual division of labor relegated the responsibility of earning monies to the husband, and the inside housekeeping chores to the wife. For any number of reasons, one of which must be the generally harsh labor force conditions then existant for black women, men preferred to keep their wives without the paid labor force, and women preferred to remain without that labor force. However, behavioral norms were often inconsistent with ideal norms, with the presence of a wife within the labor force usually being inversely related to social class. Yet, although many black women within the labor force worked because they needed the monies for themselves and their families, many other women worked not because they needed the money, but for self-actualizing purposes.

Among blacks, traditional female roles within the occupational world were often relegated on the basis of such variables as inferior economic, power, and social prestige; isolated social contact; and close proximity between the home and job. Thus, in comparison with their male counterparts, many women within the traditional female roles worked longer hours and earned fewer wages and fringe benefits. Many worked in isolation, inasmuch as they constituted the only on-site employee of a given employer, as in the case of a number of domestics. Their average number of co-workers was smaller. The distance they traversed between home and work and work and home was generally less, and less interesting.

Within work settings where administrative responsibility was delegated to or held by blacks, as in the case of black colleges, the norm of traditionally inferior female roles remained.

On the larger societal level (i.e., the United States), the patterns of sex discrimination, reinforced by racial discrimination, remained, continuing the support at all levels for inferior rewards to black female labor force participants. This same pattern remains in effect today.

The issue, then, of traditional female roles is the crucial one of deliberate misinterpretation or falsification of the roles which have been customary for black females by those who seek to limit the growth of a competitive labor pool. That is, a number of persons argue forcibly that black women have been better off than white women based upon results of sex comparisons within each group. The obvious penalties imposed upon black women by such comparisons are probably intended. The twisted logic permits distorted perceptions of black women as being "better off" than white women within the labor force (and particularly within the professions), since the occupational and income gaps between black women and men are narrower than those between white men and women. Lerner (1972, 1973) exemplifies this twisted logic in her work about black women.

In another context, Jackson (1975: 78-79) commented thusly upon the twisted Lernerian logic:

> Essentially, Lerner misled herself not only by accepting uncritically the usual myths about educational and economic positions of black females compared with black males, but, most important, by juxtaposing black and white female comparisons in assessing black females and males. That is, she was overconcerned about showing that within their own racial groups, black females enjoyed higher statuses than white females. Even here, however, she failed to provide convincing data. For example, her comparative data about the proportion of females among blacks and the proportion of females among whites who were physicians and attorneys did not show the proportion holding medical or law degrees. They showed only the proportions within the labor force. Since black women with professional degrees are far more likely than comparable whites to be gainfully employed, such data are highly circumspect in showing what Lerner would have us believe (namely that "black women are somewhat better represented than white," 1973:19). The data would not be circumspect if appropriate controls for differential sex ratios within the black and white adult populations, buttressed by extrapolations based upon equal proportions of black and white women with degrees in the labor market, had been established. But even Lerner pointed to the significantly higher representation of white than black women in the professional market.
>
> In short, her artificial dissection of black women was grossly misleading. Once again, their educational and economic opportunities are affected by race and sex, and not be race or sex. Presently, the United States contains only one control group for measuring racial and sexual discrimination: white males. Black female and white male educational and economic gaps reveal racial and sexual discrimination, while black and white male gaps reveal racial discrimination only, and white female and male gaps reveal sexual discrimination only.
>
> Lerner...overlooked such points as those stressed immediately above by following too readily the usual sexist route in showing that black females have been subjected to less oppression than black males. This sexist conclusion, replete in most social scientific and behavioral literature, was generally reached by black and white males committed to male superiority.

> Black males appeared to be more oppressed only because they were not compared with an oppressed group (i.e., oppressed black males were compared with the nonoppressed group of white males), whereas black females were compared with an oppressed group (i.e., oppressed black females with oppressed white females or oppressed black males). Black females can be regarded only categorically as less oppressed than black males by acceptance of the superiority of male over female sex role expectations, and especially so in the areas of education, occupation, employment, income and family headship. A few, of course, have long recognized that black female oppression, if not worse than that of black males, was at least equal to that of black males, with such recognition not being dependent upon their valuations of sex roles.

Moynihan (1965), who correctly called our attention to the increasing economic and related problems confronting black low-income families with female heads, is also guilty of overlooking the traditional female role as one which included working. Thus, his solution for halting further the deterioration he perceived within those black families was that of upgrading black male unemployment and underemployment. Moynihan's (1965) concentration upon improved employment conditions for males does raise an issue pertinent to the present position paper. For example, should Moynihan have concentrated upon improved employment conditions for all blacks, regardless of sex, who were or who were likely to become household or family heads? If such an approach were followed by the Federal government, what would be the consequences upon black marital patterns? Sometimes one policy with obvious advantages for one given problem can have unintended and unwanted consequences elsewhere.

How, then, can we conceptualize the issues surrounding the traditional female roles? Perhaps the most important conceptualization is one which considers the decreasing division of labor within the labor force by sex, and the increasing numerical competition for available positions, where, as was noted earlier, the demand for participation within the employed labor force has now outstripped the supply. This does not mean, of course, that additional jobs could not be generated, which would balance out more evenly the labor demand and supply. When so viewed, it becomes apparent that efforts which distort the real participation of black women as workers over time, and their increasing need for work as paid members of the labor/house forces are attempts to reduce the competitive stance of black women within the world of work. From this perspective, black women now have a head start as "surplus workers."

What is needed is a careful analysis of the various female occupational roles traditional among different black female subgroups, so as to isolate the determinants of desire for labor force participation, choice of career, and career success. This is not, one hastens to add, in contradistinction to an earlier position that women's entry into the labor force should not be dependent on their motivations for seeking work. In any case, the suggested analysis should not be limited to college students, nor to college-educated women. For example, among blacks, it has been traditional for the wives of military officers to remain without the labor force. Is a similar pattern present among their daughters, with one relevant variable being the specific occupation of the husbands of the daughters? Are black females with high school education only more influenced in occupational selections by the occupations of their mothers than is the case with black females without high school education? Are career choice and career maintenance following marriage more nearly related to situational factors without the home, or more nearly related to situational factors (including husbands' attitudes) within the home? In short, and in addition to the other types of issues surrounding traditional female roles, a major issue is the lack of adequate data, a point reiterated here for emphasis. The basic questions in this respect, then, include:

1. What are the appropriate black female subgroupings for studying their traditional female roles, with emphasis upon occupational roles?
2. What are the dominant roles and the deviant roles within such groupings?
3. What, if any, are the commonalities in traditional female roles between the subgroupings?
4. What, if any, are the differenes in traditional female roles between the subgroupings?
5. What are the factors which support continuance of the traditional female roles within each subgroup?
6. What are the factors which lead to deviation from those roles within each subgroup?

7. What are the congruences and incongruences on an individual, group, and societal level between the ideal and real norms for traditional and non-traditional female roles within and between the subgroupings?

8. How can the results of such an inquiry be used in improving the career options for various subgroups of black women in the future?

Conflicting minorities. Of the three issues specifically singled out for discussion here, this issue is the one which is most fraught with controversy, contradiction, and hostility. It raises important questions about the priorities which disadvantaged groups should receive in policies and programs designed to reduce the inequities which they have experienced as victims of prejudice and discrimination.

For example, the Federal Government's move toward setting quotas for minority admissions to institutions of higher education receiving federal funds in the late 1960's was an effort to compensate for the historical discrimination against blacks in most such institutions, and particularly so in the graduate and professional programs. However, some Jewish groups viewed with alarm the establishment of quotas in higher education, since they feared that such a move would be detrimental to them (see, e.g.,
Therefore, those Jewish groups launched various efforts to thwart the quota system, and were generally successful in moving the Federal Government's position away from "quotas" to "goals." In addition, the DeFunis case made a direct challenge against favoritism toward blacks in admission standards at

the University of Washington, but the United States Supreme Court to date has avoided a direct decision on the heart of the issue.

Various minority groups have been in conflict about the distribution of rewards and privileges in the quest for education and employment. As indicated earlier, some blacks have been especially concerned about the practices at some universities which have resulted in a disproportionately larger percentage of the wives of white faculty entering the universities as graduate or professional students and being counted as a part of the minority quota. They have also been concerned about the continuing discriminatory practices which curtail the number of blacks entering the Federally-supported predoctoral and postdoctoral programs, inasmuch as the universities often report to the Federal Government that the dearth of minorities, including blacks, in such programs is a direct result of the dearth of qualified or interested blacks, as opposed to their own lack of efforts in recruiting blacks. Consequently, an increasing number of such programs contain far more white women than would have been the case had sufficient recruitment of blacks or other nonwhite minorities occurred. In addition, some Federal Government agencies are apparently being asked by non-Japanese Asian American minorities to remember that not all Asian Americans are Japanese, as in the case of some recent complaints which have been received by the National Institutes of Health.

For any number of different reasons, the types of problems alluded to above stand in need of resolution. In the specific case of blacks, this author takes the position that the resources of the United States may well be sufficient (or could be made so) to reduce the various inequities against specific minority groups, including white women, in the areas of education and employment. However, since sufficient resources are either not yet available or are not being made available, then it is necessary to distribute these rewards and privileges on the basis of some meaningful system. Thus, there is a definite need for the establishment of minimum quotas in hirings and admissions for all institutions and businesses which qualify as federal contractors. The quotas should be set forth for specific race-sex groups. Only under such conditions will one see any substantive change in the educational and employment levels of black women throughout the remaining years of this century.

In other words, bearing in mind the growing excesses in the labor supply, as well as the decreasing proportions of black female family heads under 65 years of age within the labor force, and the increasing proportions of such families within the poverty sector of the nation, it becomes necessary to raise the important policy question of further determinations about priorities for entering the employed labor force. It is not sufficient to recognize that the Federal Government has established some priorities for household heads or for female household heads for employment positions available through Federal contractors. It is important to recognize that the establishment of such priorities is generally ineffective if the individuals designated to receive preferential treatment lack sufficient skills to warrant their employment. In fact, a number of preferential regulations have already backfired in practice. In some instances, the apparent position taken by the Federal Government has been that the employers--the Federal contractors--must also assume the responsibility of training the individuals for the positions since their lack of skills cannot operate as a barrier to receipt of the position. Yet, the same Government has thus far avoided any serious attempt to evaluate unequivocally the status of the educational quality being received by the younger counterparts of the designated preferential employees. It has pushed the burden of correcting the educational deficits upon agencies who often "must make ends meet," who do not have the power to operate upon budget deficits or to raise taxes to meet money shortfalls. Consequently, and without purposive design, the Federal Government has aided in increasing hostility and resentment against black women seeking to enter the labor force above the levels of private household and service workers.

The Federal Government, although it could not but help be aware of the myths circulating throughout the country about the preferential position of being "black and female," has failed to counter the generally false myth by providing or, more nearly, by publicizing broadly the truth. As an example, it is impossible to obtain specific data about the number of black females who receive degrees in higher education each year and the institutions which award them those degrees, inasmuch as the published materials from the United

States Department of Health, Education and Welfare continue yearly to provide information about females (which include black females) or about blacks (which include black females), but not about black females. On one occasion, several years ago, this author sought such data, and, not being able to find it elsewhere in any published government document, called the appropriate office within the Federal agency. The response, in effect, was that the presentation of specific data about black females would require additional space on the pages. The informant, when asked if she could be quoted, indicated immediately "Oh, heavingly days, no!" This is related to the issue of conflicting minorities in many different ways, with the most important one being the lack of available data which would help to resolve some of the raging controversies between minorities. In this specific case, again, too many individuals believe that black females have been most advantaged by recent acts of favoritism, but where are the data?

It is also interesting that the myths continue to circulate about the preferential treatment accorded black females in faculty recruitment efforts by the nation's colleges and universities. Unfortunately, concrete data helpful in resolving this issue have also not been publicized by the Federal Government. Yet, generally insignificant percentage gains occurred in black female representation among the faculty in senior colleges and universities throughout the nation. The female gain which did occur was probably greatest for white females. Some will explain the latter probability by resorting to the greater likelihood of white females holding the terminal degrees, and therefore possessing the minimum qualifications necessary for holding a professorship. But others will note that opportunities also arose for women to obtain terminal degrees--opportunities more magnanimous than ever before--and that the opportunities were more frequently granted to white than to black women.

Also necessary to mention at this juncture is the frequently inappropriate assistance provided by some blacks who sought to act as employment brokers for a number of federal contractors attempting to meet requirements as equal opportunity employers over the past decade. Within the academic world, for example, some few blacks took great pride in developing lists containing names and addresses of colleagues known to them who held terminal degrees. Unfortunately, they failed to recognize their involvement in "black musical chairs," a game which generated some shift in the location of a few black professionals, but which did nothing to bring about needed changes in the system of recruiting blacks by the institutions involved. On many occasions, the institutions would simply write to individuals on the list, having learned from their recruiting colleagues that those individuals were unlikely to move, but the file based upon presumed effort in reaching the goal (and not the quota) continued. In some specific instances, some institutions even resorted to the use of "dummy musical chairs." That is a game in which the rules call for the particular department or agency to have a secretary type a letter of regret to an individual who has not even applied for a position, to place the original letter in the office paper shredder, and to file the xeroxed copy within the office files. Under normal conditions (and perhaps with secretaries not employed under equal opportunity conditions), the black who has not applied and who does not know he has applied will not know that his non-application was rejected (generally on the basis of insufficient qualifications), nor will he know that he is among that number to be counted by the Office of Civil Rights if it chooses to confirm equal rights compliance.

But, under a few extreme conditions, secretaries have inadvertently mailed the letter, and then the individual becomes surprised to learn of the manipulation which occurred without his knowledge. "Dummy musical chairs" is probably relatively widespread, although insufficient empirical evidence presently exists to document the extent to which it has occurred. In some instances familiar to this author, the apparent position taken by the Office of Civil Rights which blacks have complained about "dummy musical chairs" is that the individual must bring a complaint through the Regional Office, as opposed to the Office of Civil Rights itself launching an investigation, or taking greater pains in verifying the extent of recruitment efforts which really occurred. One solution could well be that of the Office of Civil Rights requiring institutions to have greater documentation of proof which the Office of Civil Rights, in turn, would spot check.

Much of the above concentrated upon conflicting minorities, or the types of conflicts which have arisen in situations which individuals have chosen to ignore or not to carry further in a quest for equality of rights. But, clearly documented, as previously indicated, are those types of efforts which have led to the DeFunis case, as well as similar cases seeking to halt preferential hiring of minorities, or of their admission to higher education, especially in professional programs.

Within each minority, including the minority group of black women, conflict surrounding desired educational and occupational goals has also been present. It has been exacerbated by the practice of holding minority group conferences involving various groups of minority women differing widely not only in their racial and ethnic statuses, but also in other demographic and socioeconomic characteristics. Hence, such groups have produced little in the way of cogent policy formation designed to promote real career options for black women in the present and the future. A part of the conflict within such meetings is due to certain Federal actions, chiefly on the part of bureaucrats setting forth the conditions under which Federal grants will be given to help support such meetings. That is, some groups seeking Federal support for conferences have been informed that the funds would be made available to them if the range of participants is extended to include more than one minority group. In these types of situations, it would be well to evaluate the success which such groups have in reaching their objectives when the groups are relatively homogeneous or relatively heterogeneous, The factors of the types of objectives, the number of days allocated for the conferences, et cetera, must also be weighed in any such evaluations. The

National Institute of Education could well aid in providing guidelines about the optimum conditions for mixing different minority groups in specific types of conferences, and particularly so for those focused upon extending educational and employment opportunities for minorities. This is similar, of course, to Kelly's concern about greater specification of the conditions under which black women benefit more from segregated or integrated employment training.

Additional conflicts which have taken place focus upon which minorities are selected to aid other minorities. These conflicts occur within and between minority groups. An example of an intra-group minority conflict can be seen in instances where many black parents recognized the apparent contradictions in employing poorly trained aides to teachers to assist black children in acquiring langauge and mathematical skills. They also recognized the hostility generated when they complained publically about those inherent contradictions. But few such parents were sufficiently courageous to question the viability of both the career options for those women functioning as aides and the training to which their offspring were exposed. Over the past few years, however, there has been some shift to the extent that more black parents are stressing the need for qualified and experienced teachers for their offspring. The lesson to be learned for career options for black women is that opportunities for occupational training must be provided, but they must not conflict with the needs of the students or clients.

EMERGENT PRINCIPLES

When one considers the specific case of the need for greater career options for black women, as well as the conditions under which such opportunities are likely to be generated and used effectively, it becomes necessary to adopt some guiding principles, or to adhere to guiding principles already apparent within the Federal philosophies. The two most important principles already apparent and which are particularly appropriate for the further development of career options for black women are those of (1) positive discrimination, and (2) equity. That is, efforts should be made to increase favoritism for black women in the areas of postsecondary education and employment until conditions of equity have been reached in the educational and employment spheres. The determination of equity, however, cannot be based solely upon numerical or percentage bases, but must be based upon feasible indices measuring the presence or absence of discrimination.

Consequently, the types of tasks which the National Institute of Education could consider are those which lead toward the development of valid and reliable instruments for measuring discrimintion in postsecondary education.

CHAPTER THREE

MYTHS AND REALITIES ABOUT OCCUPATIONAL AND FAMILIAL STATUSES OF BLACK WOMEN

Although considerable internal movement occurred within the categorical group of black women over the past decade, relatively little progress took place in the direction of relative improvements in the employment opportunities, conditions, and rewards for black women as an aggregated group. In comparison with the groups of black men and white men and women, the black female economic status continued generally as the least enviable (see, e.g., Jackson, 1973). Within the group of black women, however, further differentiation was quite evident, as were various changes in generalizations of specific subsets of comparative black female and non-black female groups.

This chapter concentrates largely upon the occupational mobility of black women who were within the labor force in the years 1965 and 1970, and changing employment and familial patterns of black women since 1970. It also considers some of the recent revisions which may be warranted in prevailing myths about the presumed employment conditions of black women. Primary emphasis is placed upon generalizations directly or indirectly related to the development of viable career options.

At the outset, it should be emphasized that the reader will be provided frequently with data about black and white women and men. This does not mean that one should shift the comparative groupings to use the particular group at a given point in time which best makes a case for black women. As previously indicated, the only true comparative group for determining the degree of "double discrimination" affecting black women is that of white males. However, it is useful to examine data for black men and white women in order to draw inferences about the differential impacts of various Federal policies and programs in education and employment over the past few years upon specific race-sex groupings. Consequently, from time to time within this chapter, data will be presented for a "double majority" (white males), a "double minority" (black females), and two "single minorities" (black males and white females).

Further, one could also argue that comparisons about educational, occupational and related changes should be restricted to individuals between the ages of 18 and 35 years, in that the more recent and more dramatic changes have affected younger, and not older individuals. On occasion, in the data which follow, age breakouts are provided. However, one should not make the mistake of assuming that cross-sectional data comparisons contain sufficient evidence to draw conclusions about the probable reduction in educational and economic discrimination in the future. That is, the narrowing of the educational gaps by race within the younger generation, such as those between the ages of 18 and 35 years, does not necessarily mean that narrowed occupational, employment, and income gaps by race will persist for the younger generation as it ages. It is true, however, that the pooling of data for all adults could well obscure the need for differential policies and programs related to the quality of life, occupational opportunities, research and demonstration projects, et cetera, which might be developed by the National Institute of Education or other Federal agencies.

The final caveat is that most of the data presented in this chapter were taken from publications of the United States Bureau of the Census. The data, therefore, have sampling errors. However, the general procedure followed herein is that of reporting the data without giving the sampling errors, and without computing the statistical differences between various percentages, means, or medians. This is, of course, a customary way in which data have been handled, but some readers may well wish to establish a criterion of reliability and compute the statistical significance of the differences between the various race-sex groups. In any case, the reader should be cautioned that the discussion is based largely upon absolute differences in data over time or between groups.

OCCUPATIONAL MOBILITY, 1965-1970

Tables 1 and 2 (pages 41-42) contain data about occupational mobility between 1965 and 1970 for the total male and female populations, and for the total black female and male populations in the United States in 1970. An examination of data specifically about black women, 25 or more years of age, who were in the employed civilian labor force in 1965, and for whom specific occupations were reported, showed that 31.3 percent of them were within the white-, and the remaining 68.7 percent were within the blue-collar sector. The white-

Table 1. Occupational Mobility Between 1965 and 1970 By Sex for the United States Population: 1970

United States	Persons 25 years old and over	Occupation of workers in 1965												Armed Forces in 1965	Did not w in 1965 work in not repo
		Total working[1]	Professional, technical, and kindred workers	Managers and administrators, except farm	Sales workers	Clerical and kindred workers	Craftsmen and kindred workers	Operatives, including transport	Laborers, except farm	Farmers and farm managers	Farm laborers and farm foremen	Service workers, except private household	Private household workers		
TOTAL															
Total															
Male	51 869 662	39 330 610	4 968 724	3 373 234	2 607 491	2 436 893	8 244 919	7 110 525	2 187 708	1 456 340	651 565	2 552 506	28 911	2 176 621	10 172
Employed in 1970	39 750 739	34 974 303	4 651 447	3 969 308	2 386 983	2 189 149	7 271 228	6 296 587	1 801 341	1 226 709	512 458	2 166 815	20 402	1 411 323	3 365
Professional, technical, and kindred workers	6 054 332	5 059 501	4 014 023	175 754	90 749	133 441	149 341	99 546	33 298	8 771	4 469	44 831	165	260 663	734
Managers and administrators, except farm	5 046 271	4 685 427	273 100	3 082 322	318 919	156 945	252 062	153 696	58 413	19 602	6 506	63 408	191	135 627	225
Sales workers	2 747 409	2 458 777	77 609	230 054	1 494 162	68 316	82 748	86 489	27 377	12 353	4 013	29 153	180	99 315	189
Clerical and kindred workers	2 770 291	2 392 085	84 858	130 211	75 165	1 547 256	112 138	147 278	59 608	9 876	5 450	49 481	339	150 639	278
Craftsmen and kindred workers	8 908 365	8 035 324	105 685	152 904	75 308	99 828	5 998 849	613 107	213 225	45 300	32 922	126 953	648	314 795	558
Operatives, including transport	7 406 128	6 541 145	46 347	98 094	74 304	96 608	418 526	4 768 344	265 888	62 042	58 822	129 264	1 275	250 470	665
Laborers, except farm	2 071 584	1 723 179	11 811	26 131	17 059	36 136	101 336	203 900	1 037 256	29 243	36 801	54 778	1 356	68 127	280
Farmers and farm managers	1 295 936	1 153 867	5 464	10 751	4 176	2 900	15 870	18 052	6 729	969 956	39 582	3 599	-	13 016	129
Farm laborers and farm foremen	535 963	456 112	2 764	3 999	2 589	2 043	15 290	24 499	16 318	47 136	303 116	5 117	105	9 852	72
Service workers, except private household	2 853 379	2 448 599	29 605	58 797	34 383	45 510	124 574	180 930	82 276	22 247	20 593	1 658 642	2 522	100 715	334
Private household workers	25 058	20 287	181	291	169	164	494	746	953	103	184	1 569	13 601	217	7
Unemployed	1 172 183	904 153	60 693	52 530	33 465	37 160	235 521	211 850	109 253	11 723	24 354	52 576	1 785	55 182	212
Armed Forces	770 253	68 109	12 309	4 157	4 440	5 722	8 689	10 376	4 324	745	509	4 970	-	595 091	107
Not in labor force	10 176 487	3 574 045	244 085	347 239	182 603	204 864	729 481	599 712	272 870	217 163	114 244	328 145	6 724	114 965	6 457
Female	58 021 300	21 296 040	3 297 118	907 137	1 410 258	6 310 649	382 323	3 192 683	191 410	107 478	161 184	3 009 080	838 146	64 396	36 660
Employed in 1970	22 365 708	15 396 112	2 499 044	688 149	998 050	4 611 283	290 764	2 279 428	135 270	72 569	67 103	2 112 653	507 972	35 500	6 934
Professional, technical, and kindred workers	3 714 041	2 668 096	2 225 818	32 572	25 000	148 996	6 406	21 756	2 501	873	1 229	43 936	4 792	7 614	1 028
Managers and administrators, except farm	980 726	792 900	48 400	477 634	47 733	106 159	7 398	14 602	3 334	689	530	33 083	1 616	2 035	165
Sales workers	1 629 533	998 217	18 312	33 612	715 364	82 722	6 083	26 133	5 864	978	1 062	37 379	3 809	2 154	427
Clerical and kindred workers	7 069 324	5 029 349	114 220	94 528	129 143	4 096 178	20 784	108 926	16 182	2 299	2 574	124 232	10 192	9 129	2 030
Craftsmen and kindred workers	442 668	339 727	5 009	5 808	7 254	20 462	210 437	42 630	4 018	648	647	11 735	1 216	3 130	99
Operatives, including transport	3 504 180	2 421 909	15 331	12 452	29 461	59 878	26 308	1 939 609	18 714	3 662	7 995	97 225	23 090	5 674	1 076
Laborers, except farm	209 862	133 498	1 372	2 091	4 273	7 767	2 071	18 181	72 283	430	1 240	8 571	2 218	649	75
Farmers and farm managers	67 019	49 069	620	394	292	802	218	635	92	37 887	3 232	568	213	152	17
Farm laborers and farm foremen	127 296	73 691	584	188	633	1 643	400	3 098	538	20 600	36 656	2 030	1 566	45	53
Service workers, except private household	3 641 574	2 278 025	63 482	26 586	34 846	77 624	9 453	89 997	9 901	3 038	6 391	1 711 164	61 746	3 953	1 359
Private household workers	979 435	611 631	5 896	2 334	4 051	9 052	1 206	13 861	1 843	1 465	5 547	42 710	477 512	905	366
Unemployed	1 025 560	481 988	35 928	13 808	27 187	103 038	11 289	147 813	7 393	1 106	6 457	70 619	21 382	1 717	541
Armed Forces	20 116	5 795	1 284	241	128	1 000	215	292	86	-	54	357	21	9 368	4
Not in labor force	34 609 916	5 412 145	760 862	204 939	384 893	1 595 328	80 055	765 150	48 661	33 803	67 073	818 451	248 771	17 811	29 179

Source: Table taken directly from U. S. Bureau of the Census, Detailed Characteristics, United States Summary, Census of the Population: 1970, PC(1)-D, Table 230, p. 1-782. Washington, D. C.: U. S. Government Printing Office, 1973.

Table 2. Occupational Mobility Between 1965 and 1970 By Sex for the United States Black Population:1970

	Persons 25 years old and over	Occupation of workers in 1965												Armed Forces in 1965	Did not work in 1965 and work in 1965 not reported
		Total working¹	Professional, technical, and kindred workers	Managers and administrators, except farm	Sales workers	Clerical and kindred workers	Craftsmen and kindred workers	Operatives, including transport	Laborers, except farm	Farmers and farm managers	Farm laborers and farm foremen	Service workers, except private household	Private household workers		
Negro															
Male	4 718 003	3 134 966	146 634	77 209	44 371	180 536	416 684	802 617	482 765	58 882	138 732	421 711	18 138	191 043	1 391 994
Employed in 1970	3 333 394	2 682 987	136 303	70 054	39 591	164 690	331 313	707 452	393 495	43 590	105 865	365 354	12 038	114 758	535 819
Professional, technical, and kindred workers	200 078	153 302	114 005	3 370	1 463	6 249	3 598	4 627	2 423	116	225	4 808	21	11 314	35 462
Managers and administrators, except farm	109 150	91 993	8 106	50 055	3 006	4 094	4 371	5 942	3 237	226	150	4 164	36	4 370	12 767
Sales workers	58 091	44 767	1 155	2 499	24 421	2 493	1 412	2 713	1 591	84	240	2 293	64	3 392	9 932
Clerical and kindred workers	241 944	190 905	3 557	2 938	2 778	122 466	5 629	14 865	9 616	456	668	8 632	212	16 559	34 480
Craftsmen and kindred workers	543 348	443 051	2 466	2 711	1 822	5 624	290 435	41 833	30 611	2 424	4 109	14 069	258	18 767	81 530
Operatives, including transport	988 720	811 022	2 512	3 967	2 943	12 265	31 408	567 379	53 673	5 907	11 096	29 922	958	22 939	144 759
Laborers, except farm	515 964	407 919	1 140	1 482	1 036	5 281	12 672	36 661	268 373	5 358	10 269	18 415	720	11 117	96 928
Farmers and farm managers	34 906	26 413	64	101	20	29	264	633	537	20 512	1 542	222	–	194	8 299
Farm laborers and farm foremen	115 450	95 442	112	156	201	130	1 355	3 367	3 970	5 717	72 933	904	67	1 000	19 008
Service workers, except private household	510 256	407 049	3 186	2 743	1 901	6 031	10 079	28 107	21 041	2 754	4 512	283 198	1 252	14 977	88 230
Private household workers	15 687	11 124	–	52	–	18	100	325	423	26	119	767	8 550	89	4 474
Unemployed	151 028	102 179	2 373	1 310	615	3 726	15 728	23 115	22 548	1 488	5 409	11 459	645	6 695	42 154
Armed Forces	71 673	5 583	318	162	189	774	428	1 200	252	29	–	617	–	57 238	8 854
Not in labor force	1 161 703	344 217	7 663	5 683	3 776	11 346	54 018	68 850	64 488	13 773	27 478	54 291	3 447	12 321	805 167
Female	5 660 089	2 387 694	252 739	31 680	46 764	275 839	29 941	341 632	31 299	11 698	29 303	546 631	538 677	8 455	3 263 948
Employed in 1970	2 666 270	1 804 343	221 290	25 693	36 794	230 969	23 616	251 125	22 469	4 366	23 508	417 046	386 379	4 869	857 558
Professional, technical, and kindred workers	322 087	239 551	192 490	1 382	1 626	11 464	504	3 275	291	169	319	8 478	2 566	461	82 075
Managers and administrators, except farm	42 512	34 339	3 723	17 479	1 125	4 326	255	789	259	28	65	2 675	811	137	8 026
Sales workers	59 220	36 205	645	631	21 214	2 836	243	1 824	485	20	88	3 179	1 670	242	22 773
Clerical and kindred workers	417 614	281 846	7 917	2 769	6 515	196 796	1 436	15 226	1 848	84	266	19 460	5 465	1 153	134 615
Craftsmen and kindred workers	40 241	29 459	307	226	395	1 296	16 300	3 684	515	36	191	2 154	769	391	10 391
Operatives, including transport	436 561	285 934	1 925	722	2 061	4 560	2 639	200 941	3 120	438	2 217	20 835	16 561	937	149 690
Laborers, except farm	36 773	23 810	193	194	371	733	413	2 460	12 423	63	488	2 204	1 649	118	12 845
Farmers and farm managers	4 351	1 767	34	20	–	–	–	44	–	1 064	226	34	110	–	2 584
Farm laborers and farm foremen	30 354	17 273	87	19	56	81	81	536	101	929	12 400	406	1 256	45	13 066
Service workers, except private household	716 997	475 [illegible]	12 509	1 817	2 678	7 559	1 526	16 956	2 292	726	2 944	238 870	40 357	771	240 804
Private household workers	559 530	378 731	1 460	434	753	1 319	419	5 390	1 105	807	4 204	18 731	315 117	614	180 179
Unemployed	163 653	74 886	2 979	701	1 531	6 333	1 304	19 388	1 673	371	3 535	16 829	13 583	349	88 418
Armed Forces	3 050	530	76	59	–	127	22	41	–	–	–	17	–	957	563
Not in labor force	2 828 116	507 935	29 394	5 228	8 459	38 381	4 999	72 070	7 156	6 961	22 362	112 560	128 763	2 290	2 317 901

¹Includes "Occupation not reported" not shown separately.

Source: Taken directly from U. S. Bureau of the Census, Detailed Characteristics, U. S. Summary, Census of the Population: 1970, PC(1)-D, Table 230, p. 1-782. Washington, D. C.: U. S. Government Printing Office, 1973.

collar occupations were equated with professional, technical, and kindred workers; managers and administrators, except farm; sales workers; and clerical and kindred workers. The blue-collar workers were equated with craftsmen and kindred workers; operatives, including transport operatives; nonfarm laborers; farmers and farm managers; farm laborers and farm foremen; service workers, excepting private household workers; and private household workers. The white-collar participation of black women was below that of non-black females (65.2%) and males (42.4%), but higher than that of black males (18.7%).

In 1970, white-collar stability and upward occupational mobility (i.e., from blue to white-collar) was most pronounced among non-black males, while unemployment and downward occupational mobility were most visible among black females. The percentage increase for non-black males within the white-collar sector was 4.8 percent. That is, whereas 42.4 percent of all employed non-black males within the civilian labor force, for whom occupations were known, in 1965 were in white-collar occupations, in 1970, for the same cohort, 47.2 percent of them were within the white-collar section. Corresponding increases were 1.2 percent for black women, 0.7 for non-black women, and -0.5 for black men. But, although the proportion of white-collar workers of all workers within the employed civilian labor force in both 1965 and 1970 increased for three cohorts, only two cohorts experienced an actual numerical increase. The black female net gain of 19,998 was less than the non-black female gain of 89,081, but more than the black male net decrease of 12,696, and the non-black male net decrease of 699,982.

The bulk of the black female net gain within the white-collar sector occurred within the category of clerical and kindred workers. Their net gain for professional, technical, and kindred workers of only 1,274 women, as compared to 4,592 for black males, 13,511 for non-black females, and 98,349 for non-black males was below par. In the cohorts employed in both 1965 and 1970, black women were 3.1 percent of all professional, technical, and kindred workers, while black men were 1.9 percent, non-black women, 31.8 percent, and non-black men, 63.1 percent. But, although each cohort experienced some increase, when 100.0 percent is regarded as the total increase for all cohorts, then 1.1 percent of the increase could be attributed to black women, as compared to 3.9 percent to black men, 11.5 percent to non-black women, and a highly significant 83.5 percent to non-black males. Thus, the upward mobility was particularly exceptional for non-black males, if all other variables were equal, inasmuch as they only constituted 64.1 percent of the civilian labor force employed in both 1965 and 1970, as compared with 27.0 percent of non-black females, 5.3 percent of black males, and 3.6 percent of black females. Additionally, non-black males were only 42.9 percent of the total United States population, 25 or more years of age, as compared with 47.6 percent for non-black females, 5.2 percent for black females, and 4.3 percent for black males.

All cohorts experienced decreases in blue-collar workers between 1965 and 1970: 29,998 for black women; 25,436 for black men; 451,343 for non-black men; and 79,080 for non-black women. The decreases were at least partial functions of upward and downward mobility. For example, although black women were less than 9 percent of all employed professional, technical, and kindred female workers in 1965, they were almost 25 percent of all such workers who were private household workers in 1970. Of the 386,329 black women employed as private household workers in 1965, and still within the 1970 civilian labor force, 81.6 percent of them were still private household workers, while 10.4 percent were service workers (which could have merely been a change in site of position, such as cleaning in motels instead of cleaning in private homes), and 1.8 percent were in blue-collar occupations other than as service workers. A total of 3.5 percent were unemployed within the labor force, and a mere 2.7 percent had become professional, technical, and kindred workers. However, the scant upward mobility to professional, technical and kindred workers experienced by those black women who were private household workers in 1965 was higher than that experienced by their non-black female counterparts, of whom only 1.1 percent moved into the professional, technical, and kindred category, and of whom 80.5 percent were still private household workers, and 3.9 percent, unemployed.

Comparisons of race-sex cohorts in either the 1965 or the 1970 employed civilian labor force (but not necessarily both) showed net gains in white-collar workers for each. The male gains of 49.8 percent for non-blacks and

33.3 for blacks were higher, as expected, than those of 29.3 percent for blacks and 28.2 percent for non-black females. They also experienced numerical net gains over time in the blue-collar sector. About 126 percent as many black males were employed in blue-collar positions in 1970 than in 1965, as were about 117 percent black women, 113 percent non-black women, and a scant 101 percent non-black males. The scant increase for non-black males, however, should not be interpreted as a substantial gain, or even as a greater gain, for blacks, inasmuch as the non-black male enjoyed a substantially greater increase in white-collar employment over time. Actually, while the non-black male percentage within the blue-collar sector decreased from 66.1 to 62.8 percent over time, the black male increase was less than 2 percentage points, from 7.8 to 9.2 percent, and the non-black female was also less, from 21.0 to 22.3 percent. The least increase, from 5.2 to 5.7 percent, occurred for black females.

Consequently, the overall black female increase in the employed civilian labor force between 1965 and 1970, from 3.9 to 4.3 percent, was due to scant increases in their presence in both sectors of that labor force. The greatest increase, a mere 0.6 percent, was for non-black women, from 31.1 to 31.7 percent, while the black male increase of 0.2 percent represented a shift from 5.2 percent in 1965 to 5.4 percent in 1970. The total percentage increase for all three race-sex groups over time was 1.2 percent, the precise percentage, of course, of the decrease of the non-black male cohort over time.

Occupational mobility patterns reported above for the four race-sex cohorts of (1) persons in both the 1965 and 1970 civilian labor force, and of (2) persons in either the 1965 or 1970 civilian labor force (but not necessarily in both) were not entirely consistent by rank-order of group progress over time. Favorable consistency almost always prevailed for non-black males, the group experiencing the most heightened upward occupational mobility. But, although black females in the 1965 and 1970 labor forces experienced a greater percentage increase over time than was true of their non-black female and black male counterparts, cohort comparisons for those within either labor force over time revealed clearly that black female gains within the white-collar sector were less than those for males, regardless of race, and generally indistinguishable from those of non-black females. Non-black females constituted the group which benefitted most from the slight decrease in the non-black male proportion within the total labor force over time.

While such data as the above, in and of themselves, do not explain the inconsistency in progressive time shifts for any race-sex group, perhaps they suggest that purposive efforts of the federal government to increase career options, beginning at least with the efforts generated by the implementation of the Economic Opportunities Act of 1964, and throughout the next four or five years, until 1970, had the least positive impact upon improved career options (or actual employment) for black women already employed in 1965, and who remained employed in 1970, and especially so for those who were, or who aspired to be professional, technical and kindred workers. This was also the race-sex group which experienced the highest rates of unemployment and downward occupational mobility.

On the other hand, it is plausible that those efforts, coupled with other efforts within the public and private spheres, had the greatest positive impact upon non-black male upward occupational mobility. In addition, the efforts appeared to be much more effective for black males and non-black females than for black females. If so, that phenomena could well be attributed to the greater tendency of the concentration of federal efforts to enhance employment for blacks upon males than upon females, and to enhance employment for females upon whites than upon blacks, which leads to the highly probable theory that relatively little purposive effort likely to yield significant results for black women was directed toward their career options.

EMPLOYMENT PATTERNS AND RELATED DATA, 1970-1974

Changes occurring between 1970 and 197~~0~~4 within the areas of labor force status, number of weeks worked, mean earnings of workers, total money income of families, age distribution of the population, and the number of completed years of schooling for black women, as well as comparisons with black men, white men, and white women, are concentrated upon in this section. The changing patterns of similarity and dissimilarity between labor force participation by black and white women lend some credulity to the earlier expressed proposition of differential effects of efforts to reduce racial or sexual discrimination upon black and white women.

Labor force status. As may be seen in greater detail in Table 3, "Labor Force Status of Blacks and Whites, 16+ Years of Age, By Sex, in March 1974 and April 1970" (page 50), insignificant changes occurred in the percentage of black women, 16 or more years of age who participated within the civilian labor force in 1970 (47.3%) and 1974 (47.4%), with only slight increases also occurring for black and white men. The white female percentage rose from 41.1 percent in 1970 to 44.8 percent in 1974, thereby erasing any significant differences by race in female labor force participation. Thus, the unadgusted-age generalization that black women are more likely than white women to work outside the home is no longer valid.

Age-adjusted rates, of course, reveal continuing racial differences by sex. Specifically, in 1970, white women, 16-19 years of age, were more likely than black women to be within the labor force, and, in 1974, white women under 25 years of age held that distinction. For the remaining age groups, in both years, black women were more likely to be participants, but the racial differences tended to decrease with increasing age.

A slight majority of black women were without the labor force in both years, a fact often obscured in traditional analyses which emphasize more strongly black-white differences. In addition, although black female participation remained generally higher than that of white females, their unemployment rates also remained higher for each age group in both years, with the exception of those who were 65 or more years of age in 1970, and 55 or

TABLE 3

Labor Force Status of Blacks and Whites, 16+ Years of Age, By Sex, in March 1974 and April 1970*

	AGE (in years)							
CHARACTERISTIC AND GROUP	16-19	20-24	25-34	35-44	45-54	55-64	65+	16+
% in 1974 civilian labor force:								
Black females	28.3	56.3	61.8	61.5	55.1	45.0	9.5	47.7
Black males	43.9	79.5	90.3	88.3	84.3	71.3	20.7	71.3
White males	57.0	80.9	93.1	94.4	93.1	79.1	22.1	77.4
White females	48.2	62.8	51.4	53.0	54.3	41.5	8.1	44.8
% in 1970 civilian labor force:								
Black females	24.5	56.2	58.2	60.0	58.5	44.6	13.6	47.3
Black males	34.1	76.3	88.8	89.0	86.6	74.0	22.0	70.0
White males	47.3	76.3	92.7	94.3	93.5	82.1	25.9	76.5
White females	36.4	56.2	43.1	49.0	52.1	42.1	10.3	41.1
Unemployment rates, 1974:								
Black females	34.9	17.2	6.3	6.7	4.1	2.2	1.1	9.5
Black males	33.1	17.0	9.2	4.9	4.3	2.8	2.7	10.0
White males	13.0	7.6	3.6	2.3	2.8	2.6	2.9	4.3
White females	13.6	6.9	5.3	3.9	3.3	3.3	4.1	5.6
Unemployment rates, 1970:								
Black females	21.6	12.8	8.2	5.8	4.3	3.9	4.2	7.9
Black males	19.3	11.9	5.3	4.5	4.4	4.1	5.1	6.6
White males	10.4	6.4	2.9	2.3	2.5	3.0	4.2	3.6
White females	10.2	6.0	4.7	3.9	3.6	3.2	4.5	4.8

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 11.

more years of age in 1974.

The greater black female unemployment rate in comparison with black males in 1970 also reversed itself in 1974. That is, black females were more likely to ~~g~~be unemployed in 1970, and black males more likely to be unemployed in 1974. However, even here, age differences were evident. Specifically, in 1974, black females under 25 years of age, and between 35 and 44 years of age had greater unemployment than did their black male counterparts. In 1970, black females under 45 years of age were more likely, and those over that age, more likely, than their black male counterparts to experience unemployment.

Between 1970 and 1974, then, participation within the civilian labor force increased the least for black women, and differentiating age patterns of some interest were emerging. The most notable one was the decrease in labor force participation by black elderly women over time, a phenomenon which may explain their significant decrease in unemployment rates over time, and which may have been due partially to the advent of the Federally guaranteed annual income program for the aged, disabled, and blind (Supplementary Security Income).

Weeks worked in 1973 and 1969. A comparison of the number of weeks worked in 1973 and 1969 by black and white civilian females and males, 16 or more years of age, showed slightly greater increases for white females than for any other group (see Table 4, "Weeks Worked in 1973 and 1969 By

TABLE 4

Weeks Worked in 1973 and 1969 by Black and White Civilian Females and Males, 16 Or More Years of Age*

CHARACTERISTIC AND YEAR	Black Females	Black Males	White Males	White Females
1973: % of total, 16+ years of age who worked:	54.9	77.8	84.5	53.3
% of workers (100.0%) who worked:				
50-52 weeks	53.6	65.0	72.9	52.4
48-49 weeks	3.4	3.3	2.7	3.0
40-47 weeks	5.4	5.2	5.7	6.9
27-39 weeks	9.8	7.8	6.0	9.9
14-26 weeks	12.7	9.0	6.3	13.4
13 weeks or less	15.2	9.7	6.8	14.3
1969: % of total, 16+ years of age who worked:	54.6	76.3	84.1	49.6
% of workers (100.0%) who worked:				
50-52 weeks	42.8	58.2	68.6	44.2
48-49 weeks	7.5	8.9	3.6	5.3
40-47 weeks	11.7	10.6	7.1	9.8
27-39 weeks	12.1	7.6	5.9	12.1
14-26 weeks	10.8	6.2	5.7	12.4
13 weeks or less	15.1	8.5	7.1	16.2

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 12.

Black and White Civilian Females and Males, 16 Or More Years of Age," page 53), from 49.6 percent in 1969, to 53.3 percent in 1973. Corresponding increases were from 54.6 to 54.9 percent for black females, 84.1 percent to 84.5 percent for white males, and 76.3 percent to 77.8 percent for black males.

Of greater interest, perhaps, is the increase in the proportion of workers within each race-sex group who were reported as working 50-52 weeks per year. The increase for black women from 42.8 percent in 1969 to 53.6 percent in 1973, was accompanied by an increase from 58.2 percent to 65.0 percent for black men, 68.6 percent to 72.9 percent for white men, and 44.2 to 52.4 percent for white women. Although the shifts were insignificant, black women and men were also somewhat more likely to work more than 27 weeks over time, and white men and women were somewhat less likely to work less than 27 weeks over time.

In 1973, black female workers, then, were less likely than black or white men to be found in fulltime employment, but there was no difference between their status as fulltime workers and that of white women.

Mean earnings in 1973 and 1969 by education. Comparisons of the mean earnings of black and white women and men, 25 or more years of age, with earnings in 1973 and 1969 (where mean earnings were reported in 1973 constant dollars) by education, as shown in Table 5, "Mean Earnings of Black and White Females and Males, 25+ Years of Age, With Earnings in 1973 and 1969 (in constant 1973$), by Education," pp. 55-6, showed the usual relationships between education and income for each race-sex group. That is, education and income were positively correlated. The actual mean earnings also remained consistently higher for white males and black males than for black females. In 1969, white females whose educational level extended through high school completion also outearned black females of similar education, while earnings among postsecondary educational recipients were higher among black than white women. However, in 1973, black women who had completed high school only also outearned their white female counterparts. The higher black female than white female earnings in the upper educational levels can probably be explained by factors related to greater on-the-job serniority for black than white women, and the larger number of offspring by white than black women. That is, in the past, college-educated white women have also been less likely to be in the labor force than their black counterparts because they had more children. The recent decreases in number of offspring by younger black and white college-educated women may well account for increasing similarity in their labor force participation rates when appropriate controls are applied for such factors as marital status and the nature of the spouse's employment, where applicable.

Various economic events did not have the same effects across educational cohorts within each race-sex group across time, nor for different race-sex groups across time. For all persons within each group, mean earnings increased slightly for black females and males and white males between 1969

TABLE 5

Mean Earnings of Black and White Females and Males, 25+ Years of Age, With Earnings in 1973 and 1969 (in constant 1973 $), by Education*

			Years of Schooling Completed					
RACE/SEX GROUP AND YEAR	0-17+	0-7	8	9-11	12	13-15	16	17+
1973								
Black females	$ 4,127	$2,094	$2,408	$3,244	$ 4,636	$ 5,470	$ 7,480	$10,237
Black males	7,378	5,243	6,285	6,961	8,340	8,729	11,168	13,250
White males	11,672	6,710	8,233	9,718	11,371	12,591	15,423	17,770
White females	4,713	2,921	3,366	3,607	4,543	5,147	6,450	8,570
1969								
Black females	$ 3,915	$2,354	$2,774	$3,357	$ 4,477	$ 5,497	$ 7,540	$10,068
Black males	6,794	4,994	6,237	6,825	7,747	8,821	10,121	13,829
White males	11,435	6,973	8,257	9,778	11,179	12,796	17,041	19,042
White females	4,864	3,501	3,667	4,048	4,755	5,391	6,751	9,108
1973/1969 Percentage Ratios								
Black females	105.4	89.0	86.8	96.6	103.6	99.5	99.2	101.7
Black males	108.6	105.0	100.8	102.0	107.6	99.0	110.3	95.8
White males	102.1	96.2	99.7	99.4	101.7	98.4	90.5	93.3
White females	96.9	83.4	91.8	89.1	95.5	95.5	95.5	94.1
$ Difference in mean earnings, 1973								
Black females - Black males	-$3,251	-$3,149	-$3,877	-$3,717	-$ 3,704	-$ 3,259	-$ 3,688	-$3,013
Black females - White males	- 7,548	- 4,302	- 5,825	- 6,474	- 6,735	- 7,121	- 7,943	- 7,533
Black - White females	- 586	- 827	- 958	- 363	+ 93	+ 323	+ 1,030	+ 1,667
$ Difference in mean earnings, 1969								
Black females - Black males	-$2,879	-$2,640	-$3,463	-$3,468	-$ 3,270	-$ 3,324	-$ 2,581	-$3,761
Black females - White males	- 7,520	- 4,619	- 5,483	- 6,421	- 6,702	- 7,299	- 9,501	- 8,974
Black - White females	- 949	- 1,147	- 893	- 691	- 278	+ 106	+ 789	+ 960

TABLE 5 (cont.)

RACE/SEX GROUP AND YEAR	Years of Schooling Completed 0-17+	0-7	8	9-11	12	13-15	16	17+
Percentage ratio of $ difference in mean earnings, 1973/1969**								
Black females/Black males	-112.9	-119.3	-112.0	-107.2	-113.3	+ 98.0	-142.9	+ 80.1
Black females/white males	-100.4	+ 93.1	-106.2	-100.8	-100.5	+ 97.6	+ 83.6	+ 83.9
Black females/white females	+ 61.7	+ 72.1	-107.3	+ 52.5	+ 33.4	+304.7	+130.5	+173.6

*Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 10.

**A minus sign (-) means that the $ difference in mean earnings between 1973 and 1969 grew disproportionately larger in a direction unfavorable to black females. That is, the earnings gap widened. A plus sign (+) means that the $ difference in mean earnings between 1973 and 1969 grew disproportionately smaller in a direction favorable to black females. That is, the earnings gap narrowed, or, as in the case of the black females/white females, the gap could have widened. That is, a percentage of 100.0 means no change. One below 100.0 means a narrowing of the gap between the two groups, and one above 100.0 means a widening of the gap between the two groups.

and 1973, with the greatest increase occurring for black males, followed by black females. White females, on the other hand, experienced a slight time decrease. Within each race-sex group, the only ones who experienced higher mean earnings among black females were those who completed high school only and those who had postcollegiate education. These were precisely the educational groups among black males which were the only ones failing to experience higher mean earnings. The only white male group with increased mean earnings were those who completed high school education only, and no white female group experienced any increase whatsoever.

When the mean earnings of black females and males were compared over time, the income gap narrowed only between those who had received one to three years of college and those who had obtained postcollegiate education. In comparison with white males, the gaps narrowed for those who had less than an eighth grade education or more than a high school education. In comparison with white females, the black-white gap narrowed for those with less than an eighth grade education and any high school education. But, they widened in favor of the black female for those with any education beyond high school.

Professional occupational distribution of black females, 1920-1970. Before continuing with data which are more specific about earnings and related areas, it may be useful to examine the distribution of professional occupations among black females in the years 1920, 1940, 1960, and 1970, so as to obtain some idea of the types of changes which have occurred within that area. As may be seen in Table 6 "(Professional Occupational Distribution of Black Females, 1920-1970, page 59), the majority of black females who were professional workers in 1920, professional and technical workers in 1940, or professional, technical, and kindred workers in 1960 or 1970, were non-college or university teachers or nurses in each of those years. Specifically, 89.2 percent were such teachers or nurses in 1920, as were 90.9 percent in 1940, 76.3 percent in 1960, and 62.0 percent in 1970. Thus, as is evident, over the fifty-year period, there was a continuous decrease in the proportion of black female professionals or related workers within these two fields. A part of the decline can be attributed to the lack of direct comparability between the years, and particularly so between 1920 and the remaining years, inasmuch as technical and kindred workers were not included in the earliest year. But, the decline in the proportion who were classified as non-collegiate or university teachers is quite real between 1940 and 1970.

While the decline in the proportion classified as teachers can also be explained partially by increases in the proportion classified as registered nurses between 1940 and 1970, most of the increase can be explained by the expanding proportions classified as health and science technicians, although data shown within Table 6 are for health technicians only.

Since 1920, the general pattern among black professional, technical and kindred workers by sex has been that of a decrease in the proportion of fe-

Table 6. Professional occupational distribution of black females, 1920-70*

Occupation	Year 1920	 1940	 1960	 1970
% Professionals, all occupations	2.5	4.1	6.4	11.3
% base for professionals	100.0	100.0	100.0	100.0
% Accountants and/or auditors	---	---	0.8	2.0
% Writers, artists, and entertainers	7.9	3.7	2.9	1.8
% College presidents, professors, and instructors	1.4	1.5	1.1	2.0
% Designers and draftsmen	0.2	0.2	0.2	0.4
% Dietitians and nutrionists	---	---	2.0	2.0
% Lawyers and judges	0.01	0.05	0.1	0.1
% Librarians	0.1	0.7	1.8	1.8
% Natural or life & physical scientists	---	---	0.3	0.4
% Nurses	8.8	10.7	19.3	15.8
% Physicians and surgeons	0.2	0.2	0.3	0.3
% Social scientists	---	---	0.2	0.3
% Social, welfare, or recreation workers	---	0.3	5.0	7.0
% Non-college/university teachers	80.4	80.2	57.0	46.2
% Health technicians	---	---	3.2	4.3
% Other	0.99	2.45	5.8	15.6

Sources: U. S. Bureau of the Census, Population, General Report and Analytical Tables, Vol. II, U. S. Government Printing Office, Washington, D. C., 1922; U. S. Bureau of the Census, Population, The Labor Force, Occupation, Industry, Employment and Income, Vol. 3, Part 1: "United States Summary," U. S. Government Printing Office. Washington, D. C., 1943; U. S. Bureau of the Census, U. S. Census of Population: 1960 Vol. 1, Characteristics of the Population, Part 1, U. S. Summary, U. S. Government Printing Office, Washington, D. C., 1964; and U. S. Bureau of the Census, Census of Population: 1970, Detailed Characteristics, Final Report PC(1)-D1, United States Summary, U. S. Government Printing Office, Washington, D. C., 1973.

males and an increase in the proportion of males within such occupation as those of actors and entertainers, artists, college presidents, college professors, musicians, and elementary and secondary education teachers. In all probability, such fields were becoming more attractive to males, and, given the increasing tendencies for colleges and universities, including the black ones, to hire faculty with the most advanced degrees, and the greater likelihood of the black males (than the black females) to possess such degrees, the continued decrease in the proportion of black females among the ranks of college professors (and not instructors) especially may also be linked with the disproportionate receipt of doctoral training received by them. Such disproportionately smaller representation can, of course, contribute to a reduction in highly educated female models for black female college students, and, perhaps, less encouragement by faculty for them to pursue higher degrees following college graduation.

It also seems possible that a traditional occupational separation by sex is being slowly eroded among blacks, even prior to legislation promoting sex equality, and, perhaps, to a faster degree than is true among whites. It is clear that the proportion of females engaged in such occupations as those of authors, editors, and reporters; designers and draftsmen; lawyers and judges; and physicians and surgeons all show increases over time.

Quite frequently, individuals make the assumption that an increase in the percentage of blacks in any given professional occupation should be equated with occupational progress. And, on occasion, that assumption may be correct. However, such is not always the case. Therefore, it is useful in any consideration of myths and realities to note clearly that black educational, occupational, employment, and income progress cannot be measured, or is typically inappropriately and inaccurately measured by the presumed gains displayed in relevant data over time. The specific case history used here to drive home this point is taken from the State of North Carolina, which contains about one out of every twenty blacks within the United States.

Progess in black professional representation within North Carolina's employed labor force was measured with data from the 1930 and 1970 United States Bureau of the Census decennial censuses for North Carolina and the United States. Professionals were all persons listed under professional services in 1930 and under professional, technical, and kindred workers in 1970. The black percentages in the (1) total population of all colors and ages, (2) total population of all employed persons, (3) total population of all professionally employed persons, and (4) total population of all employed physicians, as well as the professional percentage in the (5) total population of all black employed persons for North Carolina and the United States were computed. They were then compared across time (1930, 1970) and region (North Carolina and the United States) for (5) above and wherever else applicable. Otherwise, computed percentage ratios /(total population of all professionally employed persons)/(black percentage) and (total population of all employed persons)/(1930 and 1970 black percentages)/ were compared across time and region. Progress occurred if the black percentages in (2), (3), and (4) above were more similar in 1970 than in 1930. For example, if blacks were 30 percent of all employed and ten percent of all professionally employed persons in 1930, and 25 percent of all employed and 24 percent of all professionally employed persons in 1970, then black professional representation had progressed over time. All 1930 employment data were for persons 10 or more years of age, and all 1970 employment data were for persons 16 or more years of age.

The numbers and percentages used are given in Table 7 (page 63). The characteristics listed in the left-hand column, such as "population, all ages and colors," indicate the type of data contained in each row. For example, the first row shows a total population of 3,170,276 persons in North Carolina in 1930. The second row shows that 29.0 percent of those persons were black, whereas in 1970, 22.2 percent of the total population in North Carolina were black.

As can be seen from the data in Table 7, between 1930 and 1970, progress in black professional representation was almost nonexistent. In 1930, in North Carolina, blacks were overrepresented in the total employment population in that they were 32 percent of that population, but only 29 percent of the State's total population. Gainful employment was then proportionately higher among blacks than whites. By "chance or luck alone," about 32 percent of all professionally employed persons should also have been black, but less

Table 7. Black Professional Employment in North Carolina and the United States, 1930 and 1970

Characteristic	North Carolina 1930	North Carolina 1970	United States 1930	United States 1970
Population, all ages and colors				
Total number	3,179,276	5,082,059	122,775,046	203,210,158
% black	29.0	22.2	9.7	11.1
Employed persons				
Total number	1,140,971	1,984,402	48,829,920	76,553,599
% black	32.0	18.4	11.3	9.6
Professionally employed persons				
Total number	51,993	218,880	3,253,884	11,351, 138
% black	18.8	11.0	4.2	5.4
Employed blacks				
Total number	365,544	364,673	5,517,781	7,361,143
% professional	2.7	6.6	2.5	8.3
Employed physicians				
Total number	2,288	4,918	153,803	280,929
% black	7.1	4.0	2.5	2.2

than 19 percent were actually black. Thus blacks were clearly underrepresented among North Carolina's 1930 professionals. Black underrepresentation among physicians was even worse. The United States showed a similar pattern. North Carolina was above the national average (did better than) in percentages of black professionals within the total black employed and the total professionally employed populations, but below that average (did worse than) for black percentages within the total number of employed persons and of physicians.

By 1970, in both North Carolina and the United States, blacks were underrepresented among all employed persons. That is, gainful employment was proportionately higher among non-blacks. In North Carolina, between 1930 and 1970, the number of employed black males decreased by about 18 percent, but employment among black females increased by about 35 percent, by about 57 percent among non-black males, and by 322 percent among non-black females. The professional percentage increased within the total black employed population in both regions across time. But the black proportion within the State's professionally employed and the physician populations, and the nation's physician population decreased over time. Blacks also showed a proportionate gain among all professionally employed persons in the nation between 1930 and 1970.

Inasmuch as the actual number of black professionals in North Carolina increased from 9,789 in 1930 to 24,175 in 1970, their proportionate decrease in the 1970 professionally employed population can be explained by substantially faster increases within the non-black population. Between 1930 and 1970, black male professionals increased by 86 percent, black females by 194 percent, non-black females by 276 percent, and, largest of all, non-black male professionals by 465 percent. However, the black professional increase was not constant across occupations. The total number of black physicians in North Carolina actually declined from 163 in 1930 to 159 in 1970. Black dentists decreased similarly from 67 to 58. In comparison with the nation, the State's rate of increase in black professionals was much slower, with the exception of the major decreases already noted, and with lawyers, where the State's increase surpassed the national average, due perhaps to the State's 1939 establishment of a black law school, a point, incidentally, which further complicates the issue of maintaining or not maintaining predominantly black state-supported institutions of higher education, although that law school contributed insignificantly to the production of black female lawyers throughout most of its first 33 years of existence, and relatively little--but greater--since then.

In general, black professional employment was relatively more suppressed in North Carolina in 1970 than in 1930. The proportionate professional increase among employed blacks was influenced heavily by numerical increases of employable blacks who were unemployed and not within the labor force, not by real growth within the professional proportions. In other words, the apparent black professional increase was largely the result of a decrease in the total number of non-professionally employed blacks. If all the blacks who sought work or who really wanted to work in 1970, but could not obtain a job, were added to the total number of persons within the black labor force, then the professional percentage would probably have been far less than three percent. Total black employment was also more suppressed in 1970 than in 1930 in North Carolina and the United States, with the State's suppression generally contrary to that of the national pattern. For example, fewer numbers of blacks were employed in 1970 than in 1930 in North Carolina, whereas numerically more blacks were employed nationally in 1970 than in 1930.

Hence, in examining changes in occupational and employment patterns for black women in particular, and blacks in general, whether in North Carolina, or anywhere within the United States, great caution should be exercised in those analyses of the changing labor force patterns and their concomitant effects upon blacks, inasmuch as most of the existing analyses or modes of analyses are too simplistic to consider the interacting effects not only of black female participation with that of other relevant race-sex groups, but also to provide sufficient cues about the probability of training in particular areas as they relate to the probability of employment for black females. Certainly, any significant thrust toward training programs for career employment among adult black women without a college education needs to be undertaken in conjunction with Federal commitments to racially and sexually desegregated employment.

Detailed employment patterns of black women in 1970. Table 8 (pages 68-79) shows the total number of employed persons, 16 or more years of age, of all colors, in detailed occupations in the United States in 1970. It also shows the number and percentage of black women in each of those occupations. Black women constituted 4.3 percent of the total number of all employed persons in that year. If all variables influencing employment within the labor force were equal, then one could assume that black women were overrepresented in any given occupation in which their percentage of the total exceeded 4.3 percent. The overrepresentation within particular occupations also suggests areas where black women have experienced less difficulty in seeking employment, areas in which they have been more interested as sources of employment, areas which have been more interested in them as employees, or any combination thereof.

Therefore, it is instructive to list those occupations in which black women were overrepresented in 1970. They are:

home management advisors
librarians
dietitians
registered nurses
therapy assistants
sociologists
file clerks
non-food counter clerks
keypunch operators
postal clerks
receptionists
statistical clerks
telephone operators
clinical laboratory technologists and technicians
health record technologists and technicians
radiologic technologists and technicians
health technologists and technicians not elsewhere classified
social and recreation workers
prekindergarten, kindergarten, and elementary school teachers
vocational and educational counselors
social welfare clerical assistants
enumerators and interviewers
library attendants and assistants

Table 8. Total Number of Employed Persons and the Total Number and Percentage of Employed Black Females in Detailed Occupations in the United States, 1970*

Occupation	Number of Persons Total	 Black Female	Black Female % of Total
Total number employed, 16+ years of age	76,553,599	3,309,080	4.3
PROFESSIONAL, TECHNICAL & KINDRED	11,351,138	374,041	3.3
Accountants	703,546	7,495	1.1
Architects	56,214	107	0.2
Computer specialists	254,537	2,655	1.0
Computer programers	161,337	1,829	1.1
Computer systems analysts	79,949	707	0.9
Computer specialists, n.e.c.	13,251	119	0.9
Engineers	1,207,509	684	0.06
Aeronautical & astronautical	65,583	19	0.03
Chemical	52,072	40	0.08
Civil	172,977	99	0.06
Electrical & electronic	281,240	147	0.05
Industrial	184,225	204	0.11
Mechanical	177,212	72	0.04
Metallurgical & materials	15,314	5	0.03
Mining	4,515	0	0.00
Petroleum	11,029	5	0.04
Sales	54,270	6	0.01
Engineers, n.e.c.	189,072	87	0.05
Farm management advisors	7,592	131	1.7
Foresters & conservationists	39,808	89	0.2
Home management advisors	5,393	618	11.4***
Lawyers and judges	272,401	497	0.2
Lawyers	260,152	446	0.17
Judges	12,249	51	0.42
Librarians, archivists, & curators	128,734	6,808	5.3***
Librarians	121,852	6,735	5.5***
Archivists & curators	6,882	73	1.1
Mathematical specialists	35,089	737	2.1
Actuaries	4,960	63	1.3
Mathematicians	7,643	113	1.5
Statisticians	22,486	561	2.5

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Life & physical scientists	202,489	1,486	0.7
Agricultural	12,705	23	0.2
Atmospheric & space	5,775	34	0.6
Biological	29,380	714	2.4
Chemists	108,486	635	0.6
Geologists	19,800	21	0.1
Marine	3,153	9	0.3
Physicists & astronomers	21,941	45	0.2
Life & physical, n.e.c.	1,249	5	0.4
Operations & systems researchers & analysts	79,478	443	0.6
Personnel & labor relations workers	290,756	6,276	2.2
Physicians, dentists, related practitioners	538,746	1,855	0.3
Chiropractors	13,729	11	0.08
Dentists	90,801	115	0.1
Optometrists	17,219	12	0.07
Pharmacists	109,642	588	0.5
Physicians, medical & osteopathic	280,929	1,051	0.4
Podiatrists	6,026	55	0.9
Veterinarians	19,435	18	0.09
Health practitioners, n.e.c.	965	5	0.5
Registered nurses, dietitians, & therapists	944,983	69,620	7.4***
Dietitians	40,131	7,514	18.7***
Registered nurses	829,691	59,007	7.1***
Therapists	75,161	3,099	4.1***
Health technologists & technicians	259,839	16,151	6.2***
Clinical laboratory technologists/nicians	117,606	7,288	6.2***
Dental hygienists	15,805	234	1.5***
Health record technologists/technicians	11,164	490	4.4***
Radiologic technologists/technicians	52,230	2,489	4.8***
Therapy assistants	3,211	310	9.6***
Health technologists/technicians, n.e.c.	59,823	5,340	8.9***
Religious workers	253,676	1,031	0.4
Clergymen	218,067	500	0.2
Religious workers, n.e.c.	35,609	531	1.5***
Social scientists	108,513	1,075	1.0
Economists	65,948	362	0.5
Political Scientists	904	3	0.3
Psychologists	27,830	501	1.8
Sociologists	1,318	65	4.9
Urban and regional planners	9,053	97	1.1
Social scientists, n.e.c.	3,460	47	1.4

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Social and recreation workers	265,954	25,778	9.7***
Social	216,623	22,771	10.5***
Recreation	49,331	3,007	6.1
Teachers, college and university	486,221	7,599	1.6
Biology	20,592	166	0.8
Chemistry	15,714	47	0.3
Engineering	16,523	36	0.2
Physics	13,961	28	0.2
Other life and physical sciences	8,867	11	0.1
Mathematics	25,947	291	0.1
Economics	9,854	15	0.2
English	38,469	671	1.7
History	16,280	127	0.8
Miscellaneous social sciences	31,540	446	1.4
Other specified teachers	150,720	2,421	1.6
Not specified teachers	137,752	3,340	2.4
Teachers, except college and university	2,741,948	172,372	6.3***
Adult education	50,166	1,905	3.8
Elementary school	1,413,915	113,544	8.0***
Prekindergarten and kindergarten	124,996	13,941	11.2***
Secondary school	1,001,509	39,689	4.0
Teachers, n. e. c.	151,362	3,293	2.2***
Engineering and science technicians	803,153	4,820	0.6
Agricultural & biological, except health	31,715	509	1.6
Chemical	60,367	688	1.1
Draftsmen	295,115	731	0.2
Electrical & electronic engineering	154,177	574	0.4
Industrial engineering	20,334	100	0.5
Mechanical engineering	13,249	31	0.2
Mathematical	770	0	0.0
Surveyors	59,368	126	0.2
Engineering and science, n.e.c.	178,058	2,061	1.2
Technicians, except health, and engineering and science	155,492	1,075	0.7
Airplane pilots	50,404	5	0.001
Air traffic controllers	25,293	76	0.3
Embalmers	4,749	64	1.3
Flight engineers	6,345	0	0.0
Radio operators	28,376	268	0.9
Tool programers, numerical control	3,083	61	2.0
Technicians, n.e.c.	37,242	601	1.6

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Vocational and educational counselors	106,679	5,469	5.1
Writers, artists, and entertainers	753,957	6,643	0.9
Actors	9,728	224	2.3
Athletes and kindred workers	48,493	270	0.6
Authors	25,376	142	0.6
Dancers	5,950	383	6.4***
Designers	108,788	874	0.8
Editors and reporters	146,925	1,445	1.0
Musicians and composers	87,834	1,096	1.2
Painters and sculptors	100,893	535	0.5
Photographers	64,691	368	0.6
Public relations men and publicity writers	73,744	720	1.0
Radio and television announcers	21,226	60	0.3
Writers, artists, entertainers, n.e.c.	60,036	526	0.9
Research workers, not specified	115,957	1,284	1.1
Professional, technical, and kindred workers--allocated	532,474	31,243	5.9
MANAGERS AND ADMINISTRATIONS, EXCEPT FARM	6,371,149	48,098	0.8
Assessors, controllers, and treasurers; local public administration	28,002	91	0.3
Bank officers and financial managers	309,438	1,520	0.5
Buyers and shippers, farm products	19,836	13	0.06
Buyers, wholesale and retail trade	174,741	1,198	0.7
Credit men	58,962	312	0.5
Funeral directors	35,800	455	1.3
Health administrators	84,135	2,201	2.6
Construction inspectors; public administration	18,474	30	0.2
Inspectors, except construction; public administration	80,205	882	1.1
Federal public admin. & postal service	50,370	589	1.2
State public administration	19,908	70	0.4
Local public administration	9,927	163	1.6
Managers & superintendents, building	83,119	1,231	1.5
Officers, pilots, and pursers; ship	24,618	10	0.04
Officials and administrators; public administration, n. e. c.	245,778	3,871	1.6
Federal public admin. & postal service	119,182	2,186	1.8
State public administration	48,582	429	0.9
Local public administration	78,014	1,256	1.6

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Officials of lodges, societies, and unions	50,085	461	0.9
Postmasters and mail superintendents	35,314	63	0.2
Purchasing agents and buyers, n.e.c.	161,438	1,107	0.7
Railroad conductors	39,445	27	0.07
Restaurant, cafeteria, and bar managers	321,209	8,086	2.5
Sales managers and department heads, retail trade	206,393	1,405	0.7
Sales managers, except retail trade	246,288	178	0.07
School administrators, college	38,928	529	1.4
School administrators, elementary & secondary	173,263	4,743	2.7
Managers & administrators, n.e.c., salaried	2,800,526	11,499	0.4
Construction	251,602	169	0.07
Manufacturing	684,354	743	0.1
Transportation	141,241	220	0.2
Communications, & utilities & sanitary	113,775	519	0.4
Wholesale trade	253,782	271	0.1
Retail trade	681,114	2,751	0.4
Finance, insurance & real estate	187,568	902	0.5
Business and repair services	140,772	444	0.3
Personal services	132,113	1,591	1.2
All other industries	184,205	3,889	2.1
Managers & administrators, n.e.c., self-employed	901,663	4,678	0.5
Construction	137,923	134	0.1
Manufacturing	66,106	94	0.1
Transportation	21,030	8	0.04
Communications & utilities & sanitary	2,594	0	0.00
Wholesale trade	54,993	75	0.1
Retail trade	428,141	3,106	0.7
Finance, insurance, and real estate	24,086	36	0.1
Business and repair services	52,235	136	0.3
Personal services	88,530	841	1.0
All other industries	26,025	248	1.0
Managers & administrators, except farm, allocated	236,485	3,568	1.5
SALES WORKERS	5,445,374	84,433	1.6
Advertising agents and salesmen	62,676	184	0.3
Auctioneers	4,780	9	0.2
Demonstrators	37,854	783	2.1***
Hucksters and peddlers	117,562	1,805	1.5***
Insurance agents, brokers & underwriters	455,624	3,334	0.7
Newsboys	61,622	151	0.2
Real estate agents and brokers	262,161	1,338	0.5
Stock and bond salesmen	97,279	295	0.3
Salesmen and sales clerks, n.e.c.	4,019,531	64,435	1.6
Sales workers--allocated	326,285	12,099	3.7

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
CLERICAL AND KINDRED WORKERS	13,748,260	684,950	5.0***
Bank tellers	249,243	8,260	3.3***
Billing clerks	106,001	3,757	3.5***
Bookkeepers	1,534,768	31,542	2.0***
Cashiers	823,512	42,681	5.2***
Clerical assistants, social welfare	1,198	177	14.8***
Clerical supervisors, n.e.c.	112,722	4,062	3.6
Collectors, bill and account	51,325	1,182	2.3
Counter clerks, except food	227,530	10,433	4.6***
Dispatchers and starters, vehicle	59,849	952	1.6
Enumerators and interviewers	64,568	3,473	5.4***
Estimators and investigators, n.e.c.	265,181	7,453	2.8
Expediters and production controllers	204,071	3,162	1.5
File clerks	356,660	38,276	10.7***
Insurance adjusters, examiners, & investigators	95,968	2,017	2.1
Library attendants and assistants	123,327	6,896	5.6***
Mail carriers, post office	252,524	2,953	1.2
Mail handlers, except post office	125,108	6,163	4.9
Messengers, including telegraph, and office boys	55,413	1,518	2.7
Meter readers, utilities	33,015	46	0.1
Office machine operators	552,580	42,378	7.7***
Bookkeeping and billing machine	63,268	3,745	5.9***
Calculating machine	34,896	1,803	5.2***
Computer and peripheral equipment	117,222	2,982	2.5
Duplicating machine	20,265	1,153	5.7***
Keypunch	272,570	29,814	10.9***
Tabulating machine	8,160	402	4.9
Office machine, n.e.c.	36,199	2,479	6.8***
Payroll and timekeeping clerks	155,717	5,008	3.2***
Postal clerks	301,927	28,595	9.5
Proofreaders	28,099	887	3.2***
Real estate appraisers	21,381	49	0.2
Receptionists	302,912	14,647	4.8***
Secretaries	2,702,099	87,886	3.2***
Shipping and receiving clerks	410,461	6,510	1.6
Statistical clerks	249,322	12,691	5.1***
Stenographers	127,957	5,520	4.3***
Stock clerks and storekeepers	450,806	11,544	2.6
Teacher aides, except school monitors	130,005	24,261	18.7***
Telegraph operators	12,257	278	2.3
Telephone operators	407,001	40,452	9.9***
Ticket, station, and express agents	98,037	2,550	2.6
Typists	977,446	85,394	8.7***
Weighers	38,887	1,363	3.5
Miscellaneous clerical workers	474,840	26,198	5.5***
Not specified clerical workers	807,244	39,443	4.9***
Clerical and kindred workers--allocated	757,209	74,293	9.8***

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
CRAFTSMEN AND KINDRED WORKERS	10,609,630	47,372	0.4
Automobile accessories installers	6,724	75	1.1
Bakers	109,192	4,207	3.8
Blacksmiths	10,227	11	0.1
Boilermakers	29,545	35	0.1
Bookbinders	34,034	1,998	5.9***
Brickmasons and stonemasons	162,242	398	0.2
Bulldozer operators	88,448	224	0.2
Cabinetmakers	67,513	270	0.4
Carpenters	842,341	999	0.1
Carpet installers	43,967	47	0.1
Cement and concrete finishers	65,579	397	0.6
Compositors and typesetters	157,403	1,351	0.8
Cranemen, derrickmen, and hoistmen	152,271	346	0.2
Decorators and window dressers	69,960	1,775	2.5
Dental laboratory technicians	26,608	440	1.6
Electricians	468,459	737	0.2
Electric power linemen and cablemen	101,892	123	0.1
Electrotypers and stereotypers	7,013	8	0.1
Engravers, except photoengravers	8,694	103	1.2
Excavating, grading, and road machine operators, except bulldozer	221,535	250	0.1
Floor layers, except tile setters	21,333	18	0.1
Foreman, n. e. c.	1,590,427	8,202	0.5
Forgemen and hammermen	15,373	75	0.5
Furniture and wood finishers	21,244	614	0.3
Furriers	2,667	55	2.0
Glaziers	25,020	82	0.3
Heat treaters, annealers, and temperers	20,309	58	0.3
Inspectors, scalers, and graders, log and lumber	17,052	530	3.1
Inspectors, n.e.c.	117,808	1,604	1.4
Jewelers and watchmakers	37,119	362	1.0
Job and die setters, metal	84,881	98	0.1
Locomotive engineers	49,340	20	0.04
Locomotive firemen	13,020	16	0.1
Machinists	378,653	1,396	0.4
Mechanics and repairmen	2,443,912	4,592	0.2
Air conditioning, heating, & refrigeration	117,592	70	0.06
Aircraft	140,215	422	0.3
Automobile body repairmen	107,638	100	0.1
Automobile mechanics	804,772	1,300	0.2
Data processing machine repairmen	31,708	77	0.2
Farm implement	33,557	30	0.1
Heavy equipment mechanic, including diesel	582,475	1,009	0.2

Table 8. (cont.)

Occupation	Number of Persons Total	Number of Persons Black Females	Black Female % of Total
Mechanics and repairmen, continued			
Household appliance and accessory installers and mechanics	122,823	229	0.2
Loom fixers	21,003	21	0.1
Office machine	39,500	43	0.1
Radio and television	137,449	414	0.3
Railroad and car shop	55,615	45	0.1
Miscellaneous mechanics and repairmen	176,594	641	0.4
Not specified mechanics & repairmen	72,971	191	0.3
Millers; grain, flour, and feed	7,130	11	0.2
Millwrights	78,422	81	0.1
Molders, metal	54,063	707	1.3
Motion picture projectionists	15,462	37	0.2
Opticians, and lens grinders & polishers	27,380	507	1.8
Painters, construction & maintenance	327,329	1,055	0.3
Paperhangers	10,260	24	0.2
Pattern and model makers, except paper	38,924	79	0.2
Photoengravers and lithographers	32,670	244	0.7
Piano and organ tuners and repairmen	6,869	19	0.3
Plasterers	28,710	108	0.4
Plumbers and pipe fitters	381,879	365	0.1
Power station operators	18,309	38	0.2
Pressmen and plate printers, printing	156,672	1,476	0.9
Rollers and finishers, metal	19,642	135	0.7
Roofers and slaters	58,274	101	0.2
Sheetmetal workers and tinsmiths	154,207	303	0.2
Shipfitters	10,601	36	0.3
Shoe repairmen	31,163	420	1.3
Sign painters and letterers	18,943	92	0.5
Stationary engineers	170,726	221	0.1
Stone cutters and stone carvers	6,309	29	0.4
Structural metal craftsmen	73,966	49	0.07
Tailors	67,582	2,228	3.3
Telephone installers and repairmen	238,729	741	0.3
Telephone linemen and splicers	52,030	64	0.1
Tile setters	31,602	66	0.2
Tool and die makers	201,945	249	0.1
Upholsterers	62,055	1,157	1.9
Craftsmen and mindred workers, n.e.c.	85,127	451	0.5
Former members of the Armed Forces	438	11	2.5
Craftsmen and kindred workers--allocated	626,534	4,752	0.8

Table 8. (cont.)

Occupation	Number of Persons Total	 Black Females	Black Female % of Total
OPERATIVES, EXCEPT TRANSPORT	10,498,525	533,496	5.1
Asbestos and insulation workers	24,340	58	0.2
Assemblers	943,907	51,082	5.4
Blasters and powdermen	7,087	26	0.4
Bottling and canning operatives	46,477	1,877	4.0
Chainmen, rodmen, and axmen; surveying	10,561	36	0.3
Checkers, examiners, & inspectors;manufacturing	690,173	28,533	4.1
Clothing ironers and pressers	181,200	55,384	30.6***
Cutting operatives, n.e.c.	174,236	5,170	3.0
Dressmakers and seamstresses, except factory	96,280	8,223	8.5***
Drillers, earth	57,208	327	0.6
Dry wall installers and lathers	43,700	25	0.06
Dyers	23,837	342	1.4
Filers, polishers, sanders, & buffers	114,173	3,732	3.4
Furnacemen, smeltermen, and pourers	65,216	448	0.7
Garage workers & gas station attendants	424,308	879	0.2
Graders and sorters, manufacturing	38,008	2,977	7.8***
Produce graders & packers, except factory,farm	26,530	1,343	5.1***
Heaters, metal	6,775	28	0.4
Laundry and drycleaning operatives, n.e.c.	169,375	29,997	17.7***
Meat cutters & butchers, except manufacturing	200,881	1,891	0.9
Meat cutters & butchers, manufacturing	67,491	4,375	6.5
Meat wrappers, retail trade	44,095	1,716	3.9***
Metal platers	31,114	255	0.8
Milliners	2,038	182	8.9***
Mine operatives, n.e.c.	155,056	263	0.2
Mixing operatives	68,249	574	0.8
Oilers and greasers, except auto	45,503	160	0.4
Packers & wrappers, except meat and produce	515,516	38,513	7.5***
Painters, manufactured articles	113,963	2,213	1.9
Photographic process workers	62,514	2,256	3.6
Precision machine operatives	411,093	2,834	0.7
Punch and stamping press operatives	159,380	4,250	2.7
Riveters and fasteners	25,194	967	3.8
Sailors and deckhands	24,707	74	0.3
Sawyers	99,753	1,114	1.1
Sewers and stitchers	867,402	78,346	9.0***
Shoemaking machine operatives	60,483	1,495	2.5***
Solderers	40,251	3,328	8.3***
Stationary firemen	94,287	493	0.5
Textile operatives	429,308	29,330	6.8***
Welders and flamecutters	537,702	3,576	0.7
Winding operatives,n.e.c.	60,789	2,617	4.3***
Miscellaneous and not specified operatives	2,520,504	98,855	3.9
Operatives, except transport--allocated	717,374	63,332	8.8

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
TRANSPORT EQUIPMENT OPERATIVES	2,957,935	13,195	0.4
Boatmen and canalmen	4,955	27	5.4
Bus drivers	235,942	4,084	1.7
Conductors & motormen, urban rail transit	9,557	79	0.8
Deliverymen and routemen	620,300	1,755	0.3
Fork lift and tow motor operatives	216,859	707	0.3
Motormen; mine, factory, logging camp, etc.	9,795	12	0.1
Parking attendants	30,491	157	0.5
Railroad brakemen	47,381	82	0.2
Railroad switchmen	52,263	112	0.2
Taxicab drivers and chauffeurs	151,644	1,606	1.0
Truck drivers	1,379,625	3,247	0.2
Transport equipment operatives--allocated	199,123	1,327	0.7
LABORERS, EXCEPT FARM	3,431,282	49,435	1.4
Animal caretakers, except farm	46,266	538	1.2
Carpenters' helpers	43,478	200	0.5
Construction laborers, except carpenters' helpers	556,952	2,371	0.4
Fishermen and oystermen	27,106	139	0.5
Freight and material handlers	539,563	8,598	1.6
Garbage collectors	71,417	455	0.6
Gardeners & groundskeepers, except farm	294,820	1,746	0.6
Longshoremen and stevedores	43,054	234	0.5
Lumbermen, raftsmen, & woodchoppers	79,507	430	0.5
Stock handlers	586,107	12,859	2.2
Teamsters	7,439	53	0.7
Vehicle washers & equipment cleaners	116,539	3,272	2.8
Warehousemen, n.e.c.	106,673	621	0.6
Miscellaneous and not specified laborers	620,939	12,730	2.0
Laborers, except farm--allocated	291,422	5,189	1.8
FARMERS AND FARM MANAGERS	1,418,746	5,518	0.4
Farmers, owners, and tenants	1,279,420	2,101	0.2
Farm managers	60,556	97	0.2
Farmers & farm managers--allocated	78,770	3,320	4.2
FARM LABORERS AND FARM FOREMEN	948,309	34,648	3.6
Farm foremen	32,622	277	0.8
Farm laborers, wage workers	743,219	25,856	3.5
Farm laborers, unpaid family workers	92,742	1,053	1.1
Farm service laborers, self-employed	3,983	125	3.1
Farm laborers & farm foremen--allocated	75,743	7,337	9.7

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD	8,627,360	843,345	9.8***
Cleaning service workers	1,861,562	205,045	13.4
Chambermaids & maids	196,767	72,581	36.9***
Cleaners and charwomen	439,063	92,745	21.1***
Janitors and sextons	1,225,672	39,719	3.2
Food service workers	2,773,573	230,411	8.3***
Bartenders	188,769	1,344	0.7
Busboys	94,412	3,223	3.4
Cooks	828,977	112,404	13.6***
Dishwashers	166,110	12,301	7.4
Food counter and fountain workers	151,381	11,556	7.6***
Waiters/Waitresses	1,019,400	45,320	4.4***
Food service workers, n.e.c.	324,524	44,263	13.6***
Health service workers	1,180,513	223,556	18.9***
Dental assistants	88,175	2,834	3.2***
Health aides, except nursing	118,907	18,689	15.7***
Health trainees	17,655	1,186	6.7***
Lay midwives	675	226	33.5***
Nursing aides, orderlies, and attendants	717,968	150,666	21.0***
Practical nurses	237,133	49,955	21.1***
Personal service workers	1,154,208	79,675	6.9***
Airline stewardesses	32,654	682	2.1***
Attendants, recreation & amusement	68,092	1,063	1.6
Attendants, personal service, n.e.c.	59,792	5,903	9.9***
Baggage porters and bellhops	18,640	184	1.0
Barbers	167,256	2,026	1.2
Boarding & lodging housekeepers	7,371	418	5.7***
Bootblacks	3,659	71	1.9
Child care workers	131,258	17,234	13.1***
Elevator operators	35,204	4,249	12.1
Hairdressers and cosmetologists	471,536	31,782	6.7***
Housekeepers	103,332	9,379	9.1***
School monitors	26,007	1,594	6.1***
Ushers, recreation & amusement	14,103	220	1.6
Welfare service aides	15,304	4,870	31.8***
Protective service workers	952,237	7,860	0.1
Crossing guards & bridge tenders	41,645	3,118	7.5***
Firemen, fire protection	176,898	99	0.06
Guards and watchmen	318,264	2,636	0.8
Marshals and constables	5,116	27	0.5
Policemen and detectives	375,494	1,773	0.5
Sheriffs and bailiffs	34,820	207	0.6
Service workers -- allocated	705,327	96,798	13.7***

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
PRIVATE HOUSEHOLD WORKERS	1,145,891	590,549	51.5***
Child care workers	212,187	26,020	12.3***
Cooks	31,297	18,571	59.3***
Housekeepers	100,695	39,894	39.6***
Laundresses	11,751	2,322	36.8***
Maids and servants	666,864	417,600	62.6***
Private household workers--allocated	123,097	84,142	68.4***
PRIVATE HOUSEHOLD WORKERS			
Living arrangement: living in	75,303	16,636	22.1
living out	1,070,588	573,913	53.6

Source of data: U. S. Bureau of the Census, Census of Population: 1970, _Detailed Characteristics_, Final Report PC(1)-D1, United States Summary, U. S. Government Printing Office, Washington, D. C., 1973. Totals summed and percentages were computed from data in Table 223.

dancers
calculating machine operators
duplicating machine operators
office machine operators not elsewhere classified
typists
bookbinders
assemblers
dressmakers and seamstresses located without factories
laundry and drycleaning operatives not elsewhere classified
milliners
non-meat and non-produce packers and wrappers
textile operatives
chambermaids and maids
cooks
food counter and fountain workers
food service workers not elsewhere classified
lay midwives
nursing aides, orderlies, and attendants
boarding and lodging housekeepers
child care workers outside of private households
hairdressers and cosmetologists
school monitors
welfare service aides
private household workers.
bookkeeping and billing machine operators
tabulating machine operators
teacher aides except school monitors
miscellaneous and non-specific clerical workers
clothing ironers and pressers
manufacturing graders and sorters
non-farm and non-factory produce graders and packers
manufacturing meat cutters and butchers
sewers and stitchers
solderers
bus drivers
cleaners and charwomen
dishwashers
waitresses
non-nursing health aides
health trainees as health service workers
practical nurses
personal service attendants without private households and not elsewhere classified
elevator operators
housekeepers without private households
crossing guards and bridge tenders

The list presented immediately above is deceptive if one considers the fact that the majority of the occupations there listed are female-dominated occupations. Consequently, since black women comprised 11.4 percent of all employed women in 1970, most of those occupations can be eliminated from any consideration of ones in which black females were overrepresented, if one ascribes generally to the usual sexual division of labor characteristic of the American labor force.

The significant black female overrepresentation among private household workers is too familiar by now to warrant much additional comment. Worth noting, however, is the fact that 62.6 percent of all maids and servants in private household work in 1970 were black females. But they comprised only 12.3 percent of all childcare workers within those private households. Black females were concentrated principally in positions as cooks, maids, and servants within those households.

Among the detailed occupations for Service Workers, black females were overrepresented among all employed females in the specific and expected occupations of chambermaids and maids; cleaners and charwomen; lower-level health service workers; and childcare workers. Overrepresentation among childcare workers without private households may be due to the larger proportion of black than white preschool children found in childcare facilities. It may also be due to various federal support patterns which encourage minority hiring. Certainly, it seems likely that federal regulations with respect to hiring were primarily responsible for the black female overrepresentation in such positions as those of welfare service aides and social welfare clerical assistants. A different cause must be used in explaining the overconcentration of black females among the lay midwives. Such a cause may well be related to earlier forms of anti-black discrimination practiced by many Southern hospitals less than two to three decades ago.

Also of interest are the few occupations which were not female-dominant, and in which a higher proportion of black females were located than one would expect by chance alone. The specific occupations here were those of non-university or college-based sociologists, recreation workers, vocational and educational counselors, mail handlers not located within post offices, tabulating machine operators, postal clerks, assemblers, manufacturing meat cutters and butchers, boatmen and canalmen, and elevator operators. Perhaps a refined analysis of the factors over and beyond those of education and racial discrimination which resulted in black females having disproportionate over- and underrepresentation in the female- and male-dominated detailed occupations specified above could help in isolating variables which could be utilized in training policies and programs leading to the development of additional career options.

Total money income of families in 1973 and 1969. A comparison of black and white female and male-headed families (in constant 1973 dollars) as of March 1974 and April 1970 (see Table 9, page 83) showed increases in median incomes for black families with female and male heads, and for white families with male heads. The 1974 income of the black female-headed family of $4,221 was 106.3 percent times as great as the 1970 income, while that of $9,551 for the black male-headed family was 111.8 percent times as great, and that of $13,128 for the white male-headed family was 105.7 percent times as great. The decrease in income for the white female-headed family can best be explained by their disproportionately larger number of elderly heads than among the remaining groups, data for which will be presented shortly.

TABLE 9

Total Money Income in 1973 and 1969 (in constant 1973$) for Black and White Female and Male-Headed Families As of March 1974 and April 1970*

RACE/SEX GROUP AND YEAR	Median Income	% under $5,000	% $15,000 or more
1974			
Black families with female heads	$ 4,221	59.1%	3.1%
Black families with male heads	9,551	21.1	22.1
White families with male heads	13,128	9.8	40.6
White families with female heads	6,554	37.3	11.1
1970			
Black families with female heads	$ 3,970	61.0%	4.2%
Black families with male heads	8,541	25.8	17.4
White families with male heads	12,424	12.1	35.3
White families with female heads	6,720	37.9	12.4

*Source: U. S. Bureau of the Census, *Current Population Reports*, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 17.

The percentage of families with incomes under $5,000 remained highest for black female-headed families in both years. In either year, about three-fifths of all black female-headed families had incomes less than $5,000, as compared with slightly more than one-third of all white female-headed families, about one-fourth of black male-headed families, and about one-tenth of white male-headed families. On the other end, the proportion of families with total money income of $15,000 or more increased for the males, but decreased slightly for the females, irrespective of race. As a matter of fact, about two-fifths of white male-headed families, and about one-fifth of black male-headed families were at that level in either year, as were about one-eighth of white female-headed families, and less than one-twentieth of black female-headed families. The dismal income pattern for black female-headed families especially was undoubtedly a function of the continuing high levels of unemployment among black youth of both sexes, as well as the increasing rates of non-participation within the labor force of black female family heads.

Age distribution, 1970 and 1974. Although it is usually necessary to base comparative generalizations over time upon percentage, and not numerical distributions, some attention must be focused upon sheer increases in the number of persons within the customary ages (i.e., between 18 and 65 years of age) for the working population. The "baby boom" of the 1950's, as well as the decreases in mortality for all races (and especially for blacks) has helped to create conditions of increased unemployment and increased competition for available jobs within the labor force in recent years. The recent federal trend toward increasing employment opportunities for the elderly, and the enactment of legislation prohibiting age discrimination, also make it necessary to consider the size of the elderly population which may be at work in the years ahead. This is necessary, too, in light of some of the recent proposals for modifying our Social Security system, one of which is to raise the minimum age for eligibility for primary beneficiaries of the Old-Age Assistance, Survivors, Dependents, and Health Insurance (OASDHI).

Among those 18 or more years of age, the 1974 black male population was 113.2 percent times as great as it was in 1970, as may be seen in Table 10 (page 86). Table 10 provides age data about the four race-sex groups of black and white women and men in 1970 and 1974. The black female population was 111.0 percent times as great in 1974 as in 1970. Corresponding data for the white male and white female populations respectively were 108.8 and 106.6 percent. Thus, if all of the black and white women and men between 18 and 34 years of age wished to enter the labor force, almost 54,000 jobs would have to be available to accommodate them. If all blacks and whites of both sexes between 18 and 64 years of age were in the labor force, almost 119,000,000 jobs would have to be available. Given those numbers for hypothetical purposes, more than 8,000,000 jobs would have been needed in 1974 than in 1970 to take care of the younger group, and more than 10,000,000 to accommodate the larger group over the same time period. Hence, it should

TABLE 10

Age Distribution by Number and Percent for Black and White Females and Males, 18+ Years of Age, 1970 and 1974*

		AGES (in years)				
RACE/SEX GROUP AND YEAR	All ages	18-24	25-34	35-44	45-64	65+
1974, Total number (in thousands)						
Black females	7,703	1,671	1,657	1,326	2,092	957
Black males	6,285	1,416	1,343	1,035	1,775	716
White males	59,351	10,817	12,622	9,772	18,413	7,727
White females	65,288	11,298	12,804	10,081	20,078	11,027
1970, Total number (in thousands)						
Black females	6,938	1,371	1,431	1,293	1,976	867
Black males	5,551	1,075	1,103	1,019	1,673	681
White males	54,561	9,043	10,514	9,793	17,764	7,447
White females	61,231	10,353	11,059	10,294	19,440	10,085
Percentage increase, 1970-1974						
Black females	111.0	121.9	115.8	102.6	105.6	110.4
Black males	113.2	131.8	121.8	101.6	106.1	105.1
White males	108.8	119.6	120.0	99.8	103.6	103.8
White females	106.6	109.1	115.8	97.8	103.3	109.3
Black female % of total number, all colors						
1974	5.6	6.6	5.8	6.0	4.9	4.7
1970	5.4	6.3	5.9	5.8	4.8	4.5

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 1.

be evident that any real discussion of career options for black women is incomplete without a focus upon job creation.

Job creation is, of course, a complex issue, and an issue over which a considerable number of reputable economists are in disagreement, as are their fellow citizens. Some would argue that the Federal Government as an employer of the last resort could create a sufficient number of jobs for all individuals seeking work. Others would argue that a reorganization of the job market (such as increasing part-time jobs for working mothers, or reducing the work week) would be more beneficial. The apparently growing support for the Hawkins-Humphrey Full Employment Bill suggests that the legislation is beginning to be viewed as a panacea, but it is not yet clear that the legislation could be implemented effectively even if it were enacted. That is, the bill, as presently proposed, does not eliminate unemployment. It only lowers the limit of "tolerable unemployment." Critical questions include the designations of subgroups for whom "tolerable unemployment" would be acceptable. The linkages between the unemployment rates of native-born citizens of the United States and the immigration to the United States of legal and illegal aliens also warrant investigation. Such an investigation may well suggest that passage of the Hawkins-Humphrey Bill, if such occurs, would necessitate logically, at this point in time, passage of the Rodino Bill to curtail immigration as well. In any case, serious consideration needs to be given to the effect of immigrant labor upon the career options for native-born black women in the United States.

Related familial data. The principal focus within this section is upon the obviously well-known trends of decreased proportions of married black females living with their spouses, the increase in black female-headed families and in primary individuals, and their relationships to the labor force.

Table 11 (page 89) depicts the marital statuses of black and white females and males, 14 or more years of age, in 1974 and 1970. Between 1970 and 1974, the percentage of married black females living with their husbands decreased. The percentage of married black females who were separated from their husbands, of course, increased. In addition, the proportion of black females who were widowed or divorced also increased slightly. Finally, there was a slight increase in the proportion of black women who had never been married. These trends between 1970 and 1974 are consistent generally with those characteristic of black women for the past several decades. A careful examination of the trends evident for black men and white women and men will reveal some similarities, as in the increased number of divorced persons over time for each of the race-sex groups under examination. However, the differences are generally more pronounced in at least two ways. One is the magnitude of the differences between the percentages of married black and white women, which has implications for the number of potential adult earners within a family. The second is the widening gap over time in those percentages.

Also, the continuing decrease in the number of males within the black marital pool, as compared with the number of females within that pool, and the recent increases in the average age at first marriage (which could be a

TABLE 11

Marital Status of Black and White Females and Males, 14 Years Old and Over, in 1974 and 1970 *

CHARACTERISTIC AND YEAR	Black Female	Black Male	White Male	White Female
1974				
% Single	30.2	38.3	27.8	21.5
% Married, spouse present	38.1	46.3	65.1	59.9
% Married, spouse absent	12.2	7.1	1.8	2.6
% Separated	10.5	5.9	1.0	1.7
% Widowed	13.7	4.2	2.3	11.8
% Divorced	5.8	4.1	3.0	4.3
Total	100.0%	100.0%	100.0%	100.0%
1970				
% Single	28.1	34.4	26.6	21.6
% Married, spouse present	41.4	50.5	65.9	59.6
% Married, spouse absent	11.9	7.5	2.3	3.1
% Separated	9.2	5.2	1.0	1.5
% Widowed	13.5	4.4	2.7	11.8
% Divorced	5.0	3.1	2.5	3.7
Total	100.0%	100.0%	100.0%	100.0%

*Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 4.

reflection of economic patterns) all affect the end result of growing numbers of black women who do not have husbands to assume the traditional roles of economic providers. As a consequence, the increasing numbers of women who are family or household heads lead to a basic assumption that the more critical question for many black women may not be that of providing jobs for women within the labor force, but that of providing more adequate jobs for all family or household heads, women or men. That is, some consideration should be given to the greater problem of expanding fulltime employment for women who are functioning in the role of economic providers, than to the problem of creating additional employment for women who are not functioning in such roles within their families. In some families, without doubt, women with spouses present also share the role of economic provider for the family. These types of problems will become increasingly intertwined in the years ahead with the movement toward providing some economic renumeration for women who have typically functioned in various jobs as volunteers who did not receive financial renumeration. One critical problem for many black women who are family heads and who are unemployed within the labor force is the time lag between their current needs and societal recognition of and appropriate provision for those needs.

Table 12 (pp. 91-93) contains data about selected familial characteristics of black and white women and men in 1974 and 1970. It shows that black female family heads constituted only 3.4 percent of all black and white family

TABLE 12

Selected Family Characteristics of Black and White Females and Males, 1974 and 1970 *

CHARACTERISTIC AND YEAR	BLACK FEMALES	BLACK MALES	WHITE MALES	WHITE FEMALES
Total number of family heads, 1974 **	1,849	3,591	44,066	4,853
Total number of family heads, 1970 **	1,348	3,470	41,412	4,212
% increase 1974/1970	137.2	103.5	106.4	115.2
% of all family heads, 1974	3.4	6.6	81.1	8.9
% of all family heads, 1970	2.7	6.9	82.1	8.4
% increase 1974/1970 of all family heads	+125.9	-95.6	-98.8	+106.0
Percent of family heads, all ages, 1974	100.0	100.0	100.0	100.0
% under 25 years	13.1	8.2	7.5	7.4
% 25-34 years	27.2	24.3	22.2	19.9
% 35-44 years	23.1	20.1	19.2	19.8
% 45-54 years	15.2	19.3	20.9	19.5
% 55-64 years	9.1	15.0	14.2	14.8
% 65+ years	12.2	13.2	14.1	18.6
Percent of family heads, all ages, 1970	100.0	100.0	100.0	100.0
% under 25 years	9.9	7.7	7.0	5.8
% 25-34 years	25.1	21.9	20.5	16.1
% 35-44 years	24.6	22.2	21.0	19.6
% 45-54 years	17.1	20.5	21.4	21.6
% 55-64 years	11.9	15.3	16.5	16.3
% 65+ years	11.4	12.3	13.5	20.6
Average size of family by race/sex of head, 1974	3.91	3.96	3.44	2.93
Average size of family by race/sex of head, 1970	4.05	4.18	3.55	3.01
% with no related children under 18 years, 1974	16.8	36.2	46.2	38.4
% with no related children under 18 years, 1970	19.8	35.1	43.8	42.6

TABLE 12 (cont.)

CHARACTERISTIC AND YEAR	BLACK FEMALES	BLACK MALES	WHITE MALES	WHITE FEMALES
% family heads in same house in March 1974 and March 1970	50.6	58.4	56.8	55.4
Mean family income	$5,811	$10,851	$15,559	$9,395
% family heads in different house, but same metropolitan area in March 1974 and March 1970	34.2	36.4	37.6	39.9
Mean family income	$4,849	$10,352	$13,930	$6,108
% unrelated individuals in same house in March 1974 and March 1970	57.0	42.8	32.9	57.1
Mean income	$3,172	$4,701	$7,494	$4,492
% unrelated individuals in different house, but same metropolitan area in March 1974 and March 1970	36.3	49.4	53.1	35.9
Mean income	$3,738	$6,159	$8,083	$4,942
Total number primary individuals, 1974**	876	756	4,812	8,333
% under 25 years of age	7.6	12.4	16.5	8.0
% 25-34 years of age	8.9	21.0	24.0	7.9
% 35-44 years of age	7.9	15.2	10.4	3.5
% 45-54 years	17.4	17.8	12.4	9.5
% 55-64 years	24.0	18.2	11.7	18.9
% 65+ years of age	34.1	15.9	24.9	
% total	100.0	100.0	100.0	100.0
Total number primary individuals, 1970**	764	597	3,929	7,056
% under 25 years of age	5.5	7.2	13.1	6.8
% 25-34 years of age	7.6	15.7	16.6	5.5
% 35-44 years of age	9.0	15.1	11.4	4.1
% 45-54 years of age	17.4	18.6	13.5	10.3
% 55-64 years of age	24.0	17.9	16.1	21.8
% 65+ years of age	36.4	25.6	29.4	51.5
% total	100.0	100.0	100.0	100.0

TABLE 12 (cont.)

*Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 6.

** Number in thousands.

heads of both sexes in the United States in 1974, up from 2.7 percent in 1970. Although some may view this increase as negligible or insignificant, it is not, inasmuch as it follows the growing trend of an increased proportion of black women serving as family heads. These women as a group deserve attention for a number of different reasons. One important reason is their growing presence among heads of families living in poverty. Another is their comparatively greater proportion among younger family heads. For example, 40.3 percent of them were under 35 years of age in 1974, as compared with 32.5 percent of black male heads, 29.7 percent of white male heads, and 27.3 percent of white female heads. A third reason is their average family size, which was higher than that of families headed by whites of either sex, and on par with those headed by black males. A final reason is their significantly greater likelihood of having related children under 18 years of age present within their families. For example, only 16.8 percent of them were without such children in 1974, as compared with 36.2 percent of black male heads, 46.2 percent of white male heads, and 38.4 percent of white female heads.

Residential stability, as measured by occupancy of the same house in 1974 as in 1970, was slightly higher for black and white male and white female heads than for black female heads. That is, black female heads were somewhat more likely to have changed residences between 1970 and 1974 than was true of the remaining groups. Only 50.6 percent of these black female heads were in the same residence in 1970 as in 1974. The greatest residential stability, 58.4 percent, occurred among black male family heads. While the mean family income was also lowest for the black females, that income was higher for those who exhibited residential stability than it was for those who moved. Most of the movers only changed houses within the same metropolitan area, but there was a tendency for the mean family income of black female-headed families to decrease as geographical mobility increased. The causal factors of this phenomenon were not apparent from the census data.

An opposite pattern of the relationship between income and residential stability characterized the unrelated individuals: the unrelated individuals who moved between 1970 and 1974 benefitted by or were those who had higher mean incomes, as compared with the nonmovers among the unrelated individuals. Among these unrelated individuals, the majority of the black and white females remained within the same house in both years, while the majority of the males (highest among white males) moved, typically within the same metropolitan area. Unfortunately, educational controls were not established for residential stability, but it is quite likely that education and residential movement were positively correlated among these unrelated individuals.

It was clear from a cursory inspection of the age distribution of the primary individuals of each race-sex group that age was a highly significant factor. Thus, while education could have been a variable, the significant difference in age is probably the best explanation for the differential patterns of stability. For example, 58.1 percent of the black female primary individuals and 71.0 percent of the white female primary individuals, but only 34.1 percent of the black male and 36.6 percent of the white male primary individuals were 55 or more years of age. The time trend for each of these groups was the increased presence of younger persons as primary individuals. This trend underscores, as well, the growing number of females who need to or who wish to assume a role as primary economic provider, largely through entering or remaining within the employed labor force.

Table 13 (page 97) contains selected characteristics of black women in the years 1963, 1967, and 1973. It shows that the increase in the number of black female family heads under 35 years of age, previously noted for the years 1970 to 1974, has been occurring for some time. The percentage of such families with earners plummeted over the years, thereby increasing the percentages of those heads who were within the unemployed civilian labor force and without the labor force. The family size increased slightly, as measured by the decrease in the proportion of families containing only two persons. Decreases also occurred in the proportions of families which contained no related children, in those where the family heads were within the employed civilian labor force, in those where the family heads worked fulltime during the year, and in those where the family heads worked at all during the year.

The proportion of black female family heads who indicated that they were not in fulltime employment during the year because of unemployment decreased between 1963 and 1973, with concomitant increases in "other" reasons. The

TABLE 13

Selected Characteristics of Black Women, 1963, 1967, and 1973 *

SELECTED CHARACTERISTIC	YEAR 1973	1967	1963	CHANGE: 1973/1963
% Female family heads under 35 years of age	50.1	35.7	32.3	+155.1
% With two persons only in female-headed families	30.8	33.7	33.3	- 92.5
% Female-headed families with no related children	9.4	20.1	20.0	- 47.0
% Female-headed families with no earners	49.3	43.5	45.2	+109.1
% Female family heads in employed civilian labor force	27.5	29.0	29.5	- 93.2
% Female family heads in unemployed civilian labor force	5.3	3.9	3.9	+135.9
% Female family heads not in civilian labor force	67.2	67.1	66.6	+100.9
% Female family heads who worked during the year	38.9	41.7	42.4	- 91.7
% Female family heads who worked fulltime during the year	7.2	11.0	9.1	- 79.1
% Female family heads working only part of the year due to:				
unemployment	6.2	2.4	6.8	- 91.2
other	22.2	23.6	20.5	+108.3
% Female family heads who did not work	61.1	58.3	57.6	+106.1
% ill or disabled	10.4	9.0	10.0	+104.0
% keeping house	45.6	44.9	40.8	+111.8
% going to school	1.7	1.5	0.8	+212.5
% unable to find work	2.0	0.8	1.9	+105.3
% other	1.3	2.1	4.1	- 31.7
Occupation of longest job of head:				
% Service workers	47.9	49.6	53.9	- 88.9
% Clerical and sales workers	21.0	18.1	13.3	+157.9
% Operatives	18.4	16.5	16.0	+115.0
% Professional, technical, and kindred workers	4.0	3.2	2.0	+200.0

*Source: U. S. Bureau of the Census, Current Population Reports, Series P-60, No. 98, "Characteristics of the Low-Income Population: 1973," U. S. Government Printing Office, Washington, D. C., 1975, Table 4.

percentage of those family heads who indicated that they did not work due to illness or disability, because they were keeping house or going to school, or because they were unable to find work also increased over the decade.

Although there were some changes over the decade by occupation of the longest job ever held by the black female family head, even in 1973, the modal area was service worker (47.9%), followed by clerical and sales workers (21.0%), and by operatives (18.4%). These kinds of data are helpful in providng some information about broad occupational categories which have already provided work experience for black female family heads who have ever had work experience. But, they provide few, if any, cues about their specific aptitudes or interests, nor about the availability of jobs within those areas in the geographical locations with the largest concentrations of unemployed and hidden unemployed (or the true unemployed) black female family heads.

MYTHS AND REALITIES, A SYNOPSIS

Much of the foregoing in this chapter has been concerned with some of the myths and realities about the occupational and familial statuses of black women. A reexamination of the chapter, including the various data tables, is helpful in isolating some of the myths which are apparent and which may be inferred, assuming that one is generally acquainted with the stereotypes which surround the occupational and familial statuses of black women. In some instances, the stereotypes may have been more valid earlier than they are now. In other instances, just the reverse may be true. And, still in other instances, the stereotype may never have been valid. In any case, the purpose of this synopsis is the listing of relevant stereotypes suggested by the foregoing materials within this chapter. The ones selected are those relevant for consideration in the development of future policies and programs directed toward improved career options for black women.

1. The anti-poverty and equal employment programs of the 1960's were successful in promoting upward occupational mobility among black women, as well as in increasing their entry level into the labor force on a higher occupational plane, or, more simply, black women obtained considerable occupational benefits from those programs. Based upon available data presented about occupational mobility for black women who were within the labor force in the years 1965 *and* 1970, it was apparent that little upward mobility took place. The race-sex group which seemed to benefit most from white-collar stability and upward occupational mobility during those years was non-black males, the overwhelming majority of whom were white males.

2. The decline in the proportion of black women within the labor force classified as private household workers is a sign of increased occupational diversity generated by a reduction in racial discrimination and better employment opportunities for black women. The proportion of black women categorized as private household workers within the employed labor force has declined over the past decade, but it is not clear that this decline indicates major shifts in their occupational patterns. That is, some who were previously classified as private household workers are now classified as service workers, but they are still primarily employed in similar occupations, such as those of maids, cooks, and laundry workers. In addition, a number of women whose earlier counterparts were private domestic workers are without the labor force, or are unemployed. Therefore, before a determination can be made about significant changes affecting the occupational distribution of black women, it is necessary to weight such changes for the various factors mentioned above.

3. Black women have always worked, or black women, as opposed to white women, have always been in the labor force. Official Federal data about the participation of women within the labor force over the years have never shown a majority of black women within the labor force at any given point in time. However, the proportion of such women within the labor force at the same time point has continued to increase over the years, and is now at its highest peak. Almost half of all black women, 16 or more years of age, are now within the labor force. In comparison with white women, appropriate controls for age now indicate that in the group under 25 years of age, white women are more likely than black women to be within the labor force, whereas, with the group 25 or more years of age, black women are more likely than white women to be within the labor force. In the older age group, as age increases, the gaps in the proportions of women within the labor force by race decrease.

4. Black women are more advantaged than black men in obtaining employment. As judged by the unemployment rates for black women and men over the past several decades, it has generally been true that black women have had

greater--and not less--difficulty than black men in obtaining employment. Black women were also less likely than black men to be in fulltime employment.

5. The typically low-income status of black female-headed families is due primarily to the absence of an adult male as husband/father. The available data more nearly suggest that the disproportionately large number of black female-headed families in poverty, as compared with black and white male-headed families, is due not to the absence of a husband/father, but due to the significant differences in labor force participation and earnings by sex and/or race.

6. Marital instability is greater among blacks than whites. This is a valid stereotype. In recent years, the gaps in the proportions of ever married women still living with their spouses by race have widened. It is highly likely that the trend toward an increased proportion of black female household and family heads will continue over the next decade or two. Consequently, it is necessary to initiate steps to increase the economic self-sufficiency of such women. Even within husband-wife families, a growing number of wives will be within the roles of joint economic providers.

Chapter Four, which is focused upon educational data and trends, is related to this chapter in that it provides some further insights into the changing socioeconomic statuses of black women in recent years.

CHAPTER FOUR

MYTHS AND REALITIES ABOUT EDUCATIONAL STATUSES OF BLACK WOMEN

This chapter is primarily concerned with myths and realities about recent educational trends in the years of formal schooling completed by black women, as well as about certain myths and realities related to them and higher education.

YEARS OF SCHOOLING COMPLETED, 1974 and 1970

Over the past few years, the most fasionable trend in most time analyses of educational levels has been that of stressing the narrowing racial gap, shown modally by the mediain educational level. In addition, emphasis has been placed upon the younger population. Table 14 (pp. 103-104) provides information on time trends between 1970 and 1974 for black and white females and males. These trends can be examined from varying perspectives.

For example, between 1970 and 1974, the percentage of black women, 25 or more years of age, who had not completed high school decreased, while concomitant increases in the proportion with at least a high school education occurred. The largest percentage increase took place among women with one to three years of college only. Yet, in 1974, over 2,000,000 black women had received no education beyond the eighth grade. Over 1,500,000 had received only one to three years of high school. Over 1,700,000 had terminated their education following the completion of high school only. Far fewer had received any postsecondary education. Most of the postsecondary education

TABLE 14

Years of Schooling Completed by Black and White Females and Males, 25+ Years of Age, 1974 and 1970*

RACE/SEX GROUP AND YEAR	Years of Schooling 0-8	9-11	12	13-15	16	17+	Total
1974, Total number (in thousands)							
Black females	2,005	1,522	1,701	481	207	113	6,030
Black males	1,971	955	1,243	420	166	113	4,868
White males	10,716	6,941	16,028	6,242	4,635	3,971	48,534
White females	11,285	8,682	22,009	6,315	3,862	1,838	53,990
1970, Total number (in thousands)							
Black females	2,281	1,481	1,231	321	164	90	5,568
Black males	2,123	1,008	877	280	99	89	4,475
White males	14,809	9,341	14,069	5,465	3,465	3,431	50,580
White females	15,213	11,481	19,586	6,140	3,105	1,580	57,105
1974, Percent							
Black females	33.2	25.2	28.2	8.0	3.4	1.9	100.0
Black males	40.5	19.6	25.5	8.6	3.4	2.3	100.0
White males	22.1	14.3	33.0	12.9	9.6	8.2	100.0
White females	20.9	16.1	40.8	11.7	7.2	3.4	100.0
1970, Percent							
Black females	41.0	26.6	22.1	5.8	2.9	1.6	100.0
Black males	47.4	22.5	19.6	6.2	2.2	2.0	100.0
White males	27.5	18.1	28.7	11.3	7.3	7.2	100.0
White females	25.0	19.4	35.7	11.3	5.7	2.8	100.0
1974/1970 Percentage Ratio							
Black females	81.0	94.7	127.6	137.9	117.2	118.8	------
Black males	85.4	87.1	130.1	138.7	154.5	115.0	------
White males	80.4	79.0	115.0	114.2	131.5	113.9	------
White females	83.6	83.0	114.3	103.5	126.3	121.4	------

TABLE 14(cont.)

RACE/SEX GROUP AND YEAR	Years of Schooling 0-8	9-11	12	13-15	16	17+	Total
Black female percentage of total, all blacks							
1974	55.4	61.4	57.8	53.4	55.5	50.0	55.3
1970	51.8	59.5	58.4	53.4	62.4	50.3	55.4
Black female percentage of total, all females							
1974	15.1	14.9	7.2	7.1	5.1	5.8	10.0
1970	13.0	11.4	5.9	5.0	5.0	5.4	8.9
Black female percentage of total, black females and white males							
1974	15.8	18.0	9.6	7.2	4.3	2.8	11.0
1970	13.3	13.7	8.0	5.5	4.5	2.6	9.9
1974/1970 Percentage Ratio							
Black female/black male	106.9	103.2	99.0	100.0	88.9	99.4	99.8
Black female/white female	116.2	130.7	122.0	142.0	102.0	107.4	112.4
Black female/white male	118.8	131.4	120.0	130.9	95.6	107.7	111.1
Black female percentage of total, both sexes, all colors							
1974	7.8	8.4	4.2	3.6	2.3	1.9	5.3
1970	6.6	6.4	3.4	2.6	2.4	1.7	4.7
1974/1970 percentage ratio	118.2	131.2	123.5	138.5	95.8	111.8	112.8

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 9.

obtained was collegiate in nature. About 481,000 of these black women had completed one to three years of college. About 207,000 had completed college, but had no post-collegiate training. About 113,000 of them had received collegiate and post-collegiate training.

The black female increase in completion of college or post-collegiate education between 1970 and 1974 was laudable as an absolute increase. However, the black female increase for completion of higher education lagged behind that of black and white males and white females. The greatest increase between 1970 and 1974 took place among black males, followed, in descending order, by white males and white females. The pattern of black women bringing up the rear in this instance parallels that of the race-sex order in which bachelors' degrees were first awarded within the United States.

The group experiencing the highest percentage increase in receipt of education beyond college was white females (121.4% as many in 1974 as in 1970). They were followed by black females (118.8%), then by black males (115.0%), and, finally, by white males (113.9%). The latter data do suggest that educational rewards were differentially distributed on the undergraduate and graduate levels over the four-year time span. Unfortunately, it was impossible to obtain specific data regarding the distribution of post-baccalaureate degrees by race and sex, due to a reason earlier noted:

the published data from the United States Department of Health, Education, and Welfare are presented by race or by sex in the annual publications of higher degrees conferred by educational institutions, and not by race and sex. Parenthetically, such a policy suggests considerable disinterest in the tracking of reductions in sex discrimination in higher education for black women.

In 1970, 32.4 percent of the black women had completed at least high school, as compared with 30.0 percent of the black men. Comparable data among their white counterparts were 54.5 percent for the men, and 55.5 percent for the women. In 1974, 41.5 percent of the black women had completed high school, a rather dramatic increase of about 9 percent over the four years. Also in 1974, 39.5 percent of the black men, 63.7 percent of the white men, and 63.1 percent of the white women had completed at least high school. If age-adjusted data are used, it becomes clear that the educational gaps by race with respect to the completion of high school are wider for the older population. Recent data about the median years of formal schooling completed by adults between 18 and 24 years of age show increasing similarities between blacks and whites of both sexes and in all regions. As a result, these types of data are becoming helpful in an understanding of the effects of education upon labor force participation, a point which will be discussed in greater detail later.

Also in 1970, 4.5 percent of all black women, 4.2 percent of all black men, 8.5 percent of all white women, and 14.5 percent of all white men had at least completed college. By 1974, the percentages had risen for each of the groups, to 5.3 percent for black women; 5.7 percent for black men; 10.6 percent for white women; and 17.8 percent for white men.

Such data as the above may well point toward the need to study various emergent implications arising from those data. For example, what has been the effect of the increasing number and proportion of college-educated black women within the labor force upon the value of a college degree within that labor market? Or, what has been the effect of the growing numbers and proportions of college-educated black women within the labor force upon the employment opportunities for black women without a college education?

It should also be recalled within this context that Table 5 (page 55) showed that the pattern of disproportionate monetary gains for educational achievement characteristic of black females, in comparison with black and white males, for some many years, did not disappear between 1970 and 1974. As an instance, the mean earnings received in 1969 and 1973 by these groups may be used. In 1969, black females with one to three years of college training earned $5,497. This was $1,476 less than the mean earnings for white males who had not completed the eighth grade. The 1969 mean earnings of $7,540 for black women who had completed college only were merely $567 more than the earnings of those same white males who had not received any education beyond the seventh grade. In 1974, the mean earnings of $5,470 of black women with one to three years of college were still $1,240 less than those of the aforementioned white male cohort. The earnings of $7,480 of the black female college-educated only cohort were merely $770 more than those of the previously identified white male cohort.

Between 1970 and 1974, as noted in Chapter Three, generalizations disparate with previous generalizations about racial differences in female labor force participation emerged. However, while absolute educational gains increased for all four race-sex groups, the relative generalizations about access to higher education usually remained constant. That is, black females were less likely to have had access to higher education, and particularly to post-collegiate professional education than were the remaining groups. Unfortunately, insufficient data are available to predict the persistence of improved educational and income gains as they relate to employment opportunities and rewards over time, due largely to the absence of longitudinal data.

BLACK WOMEN AND HIGHER EDUCATION

Relatively little attention has been devoted to the special problem of black women and higher education, and the relationship between their education and employment outlooks. In one sense, then, it is important to highlight the need of more education for black women, since an increasing number of them will join the ranks of family heads in the immediate future, and since education and labor force participation of family heads among those of working age are positively correlated.

It is also important to stress the need for college education for some black women for reasons here reiterated for emphasis: college-educated women typically earn higher incomes than non-college-educated women. Therefore, higher education for many of these females may be even more crucial in enabling them to provide for themselves and their families, thus reducing their dependency upon other members of our society. This is not to hold, however, that college education is the most important preparatory resource for income gains among the employed population. Nor is it to hold that all black women need or want a college education in order to achieve success within the occupational and income spheres.

What is more nearly true is that postsecondary education of various types seems to be feasible in promoting effective entry and subsequent participation within the labor force.

Notwithstanding the democratization which should characterize postsecondary education in the United States, it has--in truth--always been a rarity--an extreme privilege. It's dominant recipeints, as mentioned earlier, have always been white males. The first black female to receive a bachelor's degree in the United States was Mary Jane Patterson (a native of Raleigh, North Carolina), in the year 1862. But no black woman received a Ph. D. degree until 1921, almost sixty years later. In between, black women had begun receiving degrees in various professional fields, notably in medicine, law, dentistry, and nursing. Yet, even in 1970, among black women who were 25 or more years of age, about 95 percent had not received any higher education, and, even in

1975, about nine out of every ten black women within that age cohort were without higher education.

Many non-college-educated black women have made outstanding contributions to their families and their society. However, it is becoming increasingly difficult for black women to be recognized societally as significant achievers in the absence of sufficient education. In fact, in analyzing demographic characteristics of female entries in the 1950 Who's Who in Colored America, Valien and Horton (1954) regarded both higher education and professional occupation as important corollaries of such achievement.

Other characteristics singled out by Valien and Horton (1954) in their study of the characteristics of those female entries included their disproportionate Northern birth (although most were born within the South); probable earlier age of achieving distinction than true of black males and white females; disproportionate attendance at interracial colleges (about 40%), as compared with all college-educated black females; and their migratory tendencies, with the typical pattern being from the South to the North (about 50% of them lived in the North). Although no consistent relationship emerged between marital status and education, these black women of achievement were more likely to be without spouse than was true of the male entries, but the proportion single was not significantly different from that found among all black females, while it was considerably lower than that found among white women listed in Who's Who in America several years earlier (Valien and Horton, 1954). These two authors explicitly recognized the tendency of these women to follow traditional roles, as well as their greater difficulty than men in achieving national recognition. In fact, only about 16 percent of the entries in that Who's Who in Colored America were female.

In Ebony's annual specification of the most significant 100 blacks in the United States, less than ten percent have usually been female. Most of the women depicted annually, however, have either been widows of prominent black men or have broken away from the traditional educational and occupational modes expected of them, as in the case of the four black female members of the U. S. House of Representatives in 1976, but a minority have been included merely because of their position as presidents of national sororities.

The 1976 survey of national leadership by the U. S. News & World Report (19 April 1976)* also underscores the general lack of black female representatives among national leaders within the United States. None of the top thirty leaders were black, and, incidentally, only one (in the 29th position) was a female. She was Betty Ford, the wife of the U. S. President. That survey also ranked the five most influential persons as chosen by their peers in each of twelve fields for a total of sixty persons. The fields were law, industry, mayors, television, labor, finance, U. S. Senate, publishing, education, religion, U. S. House, and advertising. The two blacks included in these categories were Tom Bradley, Mayor, Los Angeles, and Barbara Jordan, U. S. House of Representatives. In addition to Jordan, the other women listed were Katharine Graham, publisher, *Washington Post*, and Bella Abzug, U. S. House of Representatives. Within the present context, it is highly significant that no woman was included within the field of education. It is also significant that none of the top ten women singled out as national leaders among women were in education. Jordan, with 25.2 percent of the vote, led the list of these top ten women.

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*The present writer participated as a respondent in that survey.

Noble's (1956) historical analysis of higher education pointed toward the desired outcome in the traditional sense for black females: the production of prude, Victorian teachers for the black masses. With rare exception, such as in the case of Mary McLeod Bethue, black women have had no control over and no governing rights within their educational training on the higher educational level:

> Though she had traditionally played an equal if not dominant role in the slave culture, *there is no evidence that she had such a role at any point in her educational history. The colonizationists and the missionaries were anxious to educate the Negro man*....the one role of her past that did come up in discussions concerning the Negro woman's education related her to her foremother's role as a concubine....Her education in many instances appears to have been based on a philosophy which implied that she was weak and immoral and that at best she should be made fit to rear her children and keep house for her husband. *Nevertheless....there was a practical* need for teachers..../and where best to recruit them for the black masses but/ from among the ranks of Negro women (Noble, 1956:24, *italics added*).

That need for teachers and the recruitment did eventually come to rely heavily upon black females. However, in 1880, males comprised about two-thirds of all employed black teachers. The predominant utilization of black females since that time continued to persist throughout the era of racial segregation in public schools. Now, however, many factors have already destroyed this traditional safe "refue" for college-educated black women.

Edwards (1964) noted that one significant gap within the area of higher education and the professions was that about black women. He felt that a study of such variables as their occupational perspectives, family backgrounds, patterns of educational support, career lives, and personalities should provide interesting and contrasting data with the males, as well as with the data he collected some years ago on black male professionals. "In one sense, the investigation of the roles of women in the professions may be conceived of as a study of a new elite" (Edwards, 1964:453). Such a study is still very much needed, notwithstanding the types of investigations published by other investigators (see, e.g., Gurin, 1966; Gurin and Epps, 1966; and Fichter, 1966, 1967).

Perhaps the best study yet available on black women college graduates is to be found in Johnson's The Negro College Graduate (1938), now more than thirty years old. Although much of that study did not provide sex differentiation as he handled his data, many of the general patterns explicated then are probably extant. One which is not should receive immediate mention. Although the ratio then of college graduates among blacks was about two males to every female, the trend of rapid equalization of the sexes among college graduates was then present.

As compared with the black male college graduates, the women tended to be younger and less likely to be married. But the vast majority of both sexes were married. The rate of marriage among the black females was higher than that among their white counterparts. Divroce rates were quite sparse among both black sexes, but they were higher among the females than among the males. It appeared that a college education affected the female marital statuses far more than it did those of their male counterparts. Among both groups, there was an increasing tendency for the college graduates to come from families whose educational, occupational, and income levels were above average within the black population.

Most of those women graduates surveyed by Johnson (1938) were found within the traditional fields of elementary and secondary teaching, or library or social work. Few were in medicine, law, and other non-traditional fields for women. While those college-educated women earned more than less educated women, their incomes were considerably below those of the college-educated males. They were generally found within the poorest paid professional occupation: teaching. A few were even domestic servants. Unemployment rates were also higher among the female members of Johnson's (1938) college graduate sample than among the males. These graduations, and especially the women, had low fertility rates and were not reproducing themselves. An investigation of vocational choices of high school sampled graduates suggested that the trend toward traditional occupational choices among the females were likely to continue for sometime, as indeed, it has. Those females generally selected teaching only, while the males were likely to opt for teaching or medicine.

Lucy D. Slowe, a Dean of Women at Howard University, was one who raised an early concern about the quality of the black woman's higher education (Slowe, 1933). She feared that inadequate training to meet their needs to live in and to contribute to the changing social order was dominant. She verified those fears through a survey based upon the responses from forty-four black institutions. Slowe concluded that those women, highly likely to have come from extremely conservative family backgrounds as related to "woman's roles" and possessed with a "psychological of inaction rather than active curiosity" attended colleges which provided them with no opportunities to develop their capacities for leading self-directed lives. They were governed by the collegiate administrations and faculties. Slowe stressed their greater participation in their own governing, but failed to note that the faculty of those students also had little or no participation in the governing of their institutions. In any case, Slowe's major concerns centered upon the neglected opportunities for self-government and self-development in the education of black women, and upon their gross lack of exposure to social studies, such as economics, sociology, political science, and psychology.

An examination of the Findings of A Conference on Current Problems and Programs in the Higher Education of Negro Women (1944), held at Spelman College, Atlanta, Georgia, 5-12 June 1944, revealed much concern about needed modifications:

> ...the Negro woman must be so educated that 1) while fully recognizing the "walls" that are built around so many groups by our present civilization, she does not permit these walls to enclose or to frustrate her; 2) and more important, that she does not "wall-in" herself. In other words, the education would include: (1) Compulsory training in the economic organization of contemporary living from the viewpoint of the producer, the worker and the consumer. Women do little of the nation's producing, much of the nation's work, and virtually all of its consumer buying. All training should bear these facts in mind; (2) Provision for vocational and occupational guidance; (3) Materials on job requirements and available curriculum offerings related to them; (4) Adequate placement techniques and programs for graduates and students who cannot complete their college courses; and (5) An effective vocational follow-up program (p. 214).

Apparently the Conference accepted higher education as a means to an occupation for black women, for there was no explicit consideration given to education for the sake of education--merely to produce a highly cultivated woman. In general, if women were educated and black, they were expected to work, an observation much in line with Noble's (1956) stress upon the utilitarian quality of higher education for black women. And, in fact, employment rates among black women are highest among college-educated women, then and now.

More recent studies (e.g., Bock, 1969; Fichter, 1966, 1967; Gurin, 1966; and Gurin and Epps, 1966) reconfirm the traditional characteristics of higher education for black women, including their greater pursuit than men of conventional academic majors and occupational careers and stronger interests in "people-oriented" subjects. They also show that, as for males, the higher the socioeconomic status of their families, the greater the probability they will obtain a college education. Beyond that, those among them who are less likely to follow traditional modes are far more likely to have professional parents, with at least one such parent being a top professional, and their fathers' influences upon them may be particularly strong.

It is clearly not true, however, that Bock (1969:18) was correct in asserting that:

> The history of Negroes...has created...the "unnatural superiority" of Negro women. In comparison with Negro males, females belong to a higher class, as measured by education, acculturation, income and familiarity with the white world.

Certainly the myth about the presumed educational superiority of the black female, as opposed to the black male, has little basis in fact. Black female income has always been less on the average than that of the black male. If familiarity with the white world implies working in "Miss Ann's" kitchen and sexual cohabitation with white males, this is not the type of acculturation which is highly desired--in fact, black women could well have done without that, and black men are blessed that they were not so subjected. Such myths, in all probability, were largely promulgated by white social scientists especially bent upon providing rationalizations sufficiently useful in supporting the status quo--namely continued racial segregation and degradation of blacks.* They were, of course, dysfunctional for improving career options for black females.

The contemporary demographic status of black women and higher education has already been partially described. Here, it should be noted that in the mid-1970's that among black females, the higher their socioeconomic background and the more intact their families, as well as the fewer their siblings, the greater is the likelihood that they will be recipients of higher education. While greater measured intellectual capacities may well improve their chances of obtaining higher education, social class is probably still a far more significant variable in both directions. That is, various "natural" factors tend to promote higher education among females of upper middle class to upper class origin, while various "contrived" factors, largely related to federal policies for student loans, have tended to promote the education of those within the lower rungs of the black social stratificational system. Anyway, for those of lower social status, family influence is apparently far less important (except for siblings) than is that of significant teachers and peers. An additional factor becoming increasingly important over the past few years (and coinciding with the community or junior college movement) is the geographical proximity of institutions to individuals desiring higher education.

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*A few years ago, this writer examined relevant works by white male and female social scientists, and gave blind passages (i.e., without the name of the author) to some black students in a Sociology course. They were not able to distinguish between passages written by white males or by white females, including such authors as Cynthia Epstein, Jessie Bernard, and Gerda Lerner. Clearly, there is much more racial affinity than sexual affinity on this issue as it has typically been presented within the literature. It should also be noted that a majority of black male social scientists, and a significant proportion of black female social scientists, as well, continue to support the thesis of the greater socioeconomic superiority of the black female.

Comparisons of the types of education received by black females who attend senior colleges and universities are difficult to make, for such reasons as the earlier mentioned dearth of data. However, it is probably safe to examine degrees conferred and the major areas of study by looking at black institutions of higher education in the year 1968-1969, since most black females completing college in that year were definitely enrolled in black institutions.

Table 15 (page 120) contains data on those degrees conferred by 87 black senior institutions by sex and by most of the fields of specialization in which those degrees were conferred. Almost one-half (46.9%) of those degrees were awarded in the field of Education. Over two-fifths of the degrees in Education (43.1%) were in Elementary Education. Yet, a surprisingly small proportion (less than one percent) were apparently in Secondary Education, which may be partially explained by a tendency of concentration in major fields of study for preparation to teach on the secondary level, as opposed to the pursuit of a degree within Secondary Education. Approximately 13 percent of those degrees were in Business and Commercial Education; 12.2 percent in Physical Education; 4.4 percent in Music Education; 1.9 percent in Trades and Industrial Education; 1.7 percent in Art Education; and 1.6 percent in

Table 15. Earned bachelors' degrees conferred by 87 black institutions, 1968-1969, by sex and most major fields of specialization*

Field of Specialization	Number of conferred degrees	% Female	% Male
Education	7,261	73.2	26.8
Business and Commerce	1,948	44.2	55.8
Sociology	1,125	72.6	27.4
Mathematics	840	44.2	55.8
History	834	37.9	62.1
Biology	816	45.5	54.5
English and Literature	485	86.4	13.6
Political Science	403	22.1	77.9
Psychology	397	66.2	33.8
Foreign Language and Literature	324	77.5	13.6
Home Economics	315	97.5	2.5
Chemistry	287	26.1	73.9
Engineering	268	2.6	97.4
Agriculture	136	5.9	94.1
Architecture	35	8.6	91.4
Premedical, dental, or veterinarian	30	33.3	66.7
Philosophy	18	22.2	77.8
TOTAL	15,492	53.8	46.2

*Source: Mary E. Hooper and Marjorie O. Chandler: Higher Education--Earned Degrees Conferred: 1968-1969. Part B--Institutional Data. U. S. Government Printing Office, Washington, D. C., 1971. The table was compiled from raw data available in this source.

Recreation, with far smaller proportions in such areas as Agricultural Education, Speech and Hearing Impairment, Education of the Mentally Retarded, and Health Education.

A comparison by sex shows that the female graduates were more numerous in Home Economics (97.5%), English and Literature (86.4%), Foreign Language and Literature (77.5%), Education (73.2%), Sociology (72.6%), and Psychology (66.2%). The males were dominant in the remaining fields. Engineering, Agriculture, and Architecture were definitely male fields, as evidenced by the very small proportions of female graduates recorded there.

Another way of surveying sex preferences is by ranking these fields in terms of the number of graduates in each, as is shown in Table 16 (page 122). Education was the modal field for both sexes. However, almost two-thirds of the females and only about one-forth of the males were in this area. Hence, the females were more than twice as likely as the males to major in Education. About 84 percent of all of the females were found in one of three fields: Education, Business and Commerce, or Sociology. By contrast, only about one-half of the males were located within the three highest ranked fields for them: Education, Business and Commerce, or History.

Additional insights about black females and higher education within predominantly black institutions may be gleaned from data available concerning degrees awarded for graduate and professional studies. Table 17 (page 123) contains data on earned master's degrees conferred by black senior institu-

Table 16. Rank Order of Major Fields of Specializations of Conferred Degrees by Sex, for Black Institutions, 1968-1969

	Rank Order	
Field of Specialization	Females	Males
Education	1.0	1.0
Business and Commerce	2.0	2.0
Sociology	3.0	7.0
English and Literature	4.0	13.0
Biology	5.0	5.0
Mathematics	6.0	4.0
History	7.0	3.0
Home Economics	8.0	17.0
Psychology	9.0	10.0
Foreign Languages and Literature	10.0	12.0
Political Science	11.0	6.0
Chemistry	12.0	9.0
Premedical, dental, or veterinarian	13.0	15.0
Agriculture	14.0	11.0
Engineering	15.0	8.0
Philosophy	16.0	16.0
Architecture	17.0	14.0

Table 17. Earned Master's Degrees Conferred by Black Institutions, 1968-1969, by sex and field of specialization

Field of Specialization	Number of conferred degrees	% Female	% Male
Education	1,594	63.7	36.3
Business and Commerce	76	19.7	80.3
English and Literature	65	78.5	21.5
Mathematics	63	50.8	49.2
History	52	30.8	69.2
Biology	39	25.6	74.4
Chemistry	41	14.6	85.4
Sociology	16	62.5	37.5
Political Science	15	0.0	100.0
Psychology	15	26.7	73.3
Agriculture	14	14.3	85.7
Foreign Languages and Literature	13	30.8	69.2
Engineering	11	0.0	100.0
Home Economics	9	33.3	56.7
TOTAL	2,023	57.7	42.3

*Source: Mary E. Hooper and Marjorie O. Chandler: *Higher Education--Earned Degrees Conferred: 1968-1969*, Part B--Institutional Data. U. S. Government Printing Office, Washington, D. C., 1971. The table was compiled from raw data available in this source.

tions in 1968-1969, also by sex and field of specialization. The largest number of those degrees were awarded in Education, as was true of the bachelor's degrees. About 39 percent of them were in Elementary Education, about 18 percent in Counseling and Guidance, about 10 percent in Secondary Education, about nine percent in Educational Administration, Supervision, and Finance, and about four percent in Education of the Mentally Retarded. Fewer proportions were in such areas as Business and Commercial Education, Physical Education, Education of the Emotionally Disturbed, Agricultural Education, Industrial Arts Education, Music Education, and Education of Exceptional Children not previously classified. In fact, almost 79 percent of all of the degrees shown were in Education. Only about four percent were found within the next highest field (Business and Commerce), followed by about three percent each in English and Literature, Mathematics, and History, and about two percent each in Chemistry and Biology. Well over one-third of all the graduate offerings available within black institutions are in Education. A similar proportion of black institutions providing graduate work in any field have programs available only in Education.

Women recipients were in the majority in only four of the fourteen fields depicted in Table 17 (page 123). These fields were Education, English and Literature, Mathematics, and Sociology. No women graduates were within the fields of Political Science or Engineering. A comparison of this distribution to that previously presented on bachelor's degrees shows that the women retained their dominance in Education, Sociology, and English and Literature only. On the master's level, male graduates were the majority in Psychology, Foreign Language and Literature, and Home Economics.

The majority of the students at the 21 institutions which conferred graduate degrees were female. Yet, one-third of those institutions awarded graduate degrees in 1968-1969 to a male majority. This was true at Tuskegee Institute, North Carolina Central University, Lincoln University (Missouri), Fisk University, Howard University, Coppin State College, and Jackson State College. These institutions represented one-half of the private and almost one-fourth of the public institutions among the total of the 21 institutions. The suggested trend is that female dominance among the graduate degree recipients may well be more characteristic of the public than of the private black institutions. In fact, female graduate degree recipients were more numerous in 1968-1969 at Tennessee State University, Alabama State University, Southern University, North Carolina A. and T. State University, Virginia State College, Atlanta University, Central State University, South Carolina State College, Prairie View A. and M. College, Hampton Institute, Florida A. and M. University, Fort Valley State College, Xavier University, and Morgan State College.

Atlanta University had both the largest number of female (159) and male (142) graduates, followed by Southern University for the females (156) and Prairie View A. and M. College for the males (95). Prairie View had the third largest number of females (152) and Florida A. and M. University the fourth (142). Southern University ranked third for the males (85), and Howard University fourth (80).

The percentage of male recipients jumps enormously in an examination of the professional and doctoral degrees awarded by black institutions during the year 1968-1969. Data are shown for these degree recipients by sex in Table 18 (page 127). Women recipients were only nine percent of the total. The largest absolute number of women graduates were in Medicine. The least, again in absolute numbers, were in Chemistry. On the degree levels shown, all of these fields are highly nonconventional for black women.

Five black institutions provided medical, veterinary, and/or law training. Of them, Howard University was the most liberal for women, as measured by the proportion of female graduates within the applicable fields. About 19 percent of Howard's medical graduates were female, while less than seven percent of Meharry's medical graduates were female. Meharry failed to award a dental degree to any female, while about seven percent of the dental degrees granted by Howard were received by females. Southern University, *with one female law graduate*, had the highest proportion of female graduates (16.7%). Approximately 10 percent (N = 12) of Howard's law graduates were female. Less than five percent of the law graduates from North Carolina Central University were female.

Almost no females were ever found in the professional theology programs, but Howard's graduating class did have one in 1968-1969. Johnson C. Smith

Table 18. Earned Doctoral and Professional Degrees Conferred by Black Institutions, 1968-1969, by Sex and Field of Specialization

Field of Specialization	Number of conferred degrees	%Female	%Male
Chemistry (Ph. D.)	3	33.3	66.7
Counseling and Guidance (Ph. D.)	1	0.0	100.0
Political Science (Ph. D.)	2	0.0	100.0
Medicine (M. D.)	125	14.4	85.6
Dentistry (D. D. S.)	84	5.0	95.0
Law (LL. B.)	146	9.6	90.4
Veterinary Medicine (D. V. M.)	29	3.5	96.7
Theology (B. D.)	45	2.2	97.8
Total	435	9.0	91.0

*Source: Mary E. Hooper and Marjorie O. Chandler: Higher Education--Earned Degrees Conferred: 1968-1969, Part B--Institutional Data. U. S. Government Printing Office, Washington, D. C., 1971. The table was compiled from raw data available in this source.

University (which has since discontinued its theological program in Charlotte), the Interdenominational Theological Seminary, and Virginia Union University had none. Most of the black professionals mentioned above have generally been trained at black institutions, so it is probably quite apparent that black women are and have been grossly underrepresented in such fields as Medicine, Law, and Theology, as have women generally. Since 1968-1969, there has been a trend toward elevated proportions of women receiving professional degrees from these institutions.

Some comparison of the 1968-1969 patterns at the black institutions with those found in the United States in 1968-1969 may be useful. In that year, recipients of bachelor's degrees most often were found in Education (with the majority in Elementary Education), followed by the Social Sciences, and by Business and Commerce.

The four most populous fields for males were Business and Commerce, Social Sciences, Engineering, and Education, and in that order. The male graduates from the black institutions failed to approximate that pattern. As may be recalled, the modal field for them was Education.

The most numerous fields for all female recipients of bachelor's degrees were, in descending order, Education, Social Sciences, and English and Literature. Education was also the modal field for the female graduates from the black institutions. However, Business and Commerce also ranked high for them. This phenomenon may then have been due to the greater tendency of black females to pursue secretarial and other business fields at a senior college, as opposed to community, junior, vocational, or business colleges. It could have also been due to their greater inaccesibility to these latter institutions, or to their greater receptivity at black-operated institutions. In any case, time has also brought about some changes in recent years, in that a larger proportion of black secretaries within the labor force did not attend senior college than was true of those with post-secondary education in earlier years.

For males, the most numerous fields in which master's degrees were awarded were Education, Business and Commerce, and Social Sciences. An approximated pattern is found among the black institutional graduates on this level. A similar pattern prevailed among the females, who were most numerous in Education, followed by Social Sciences, and then English and Literature.

On the doctoral levels, all males were most numerous in Education, Physical Sciences, and Engineering. Females were most numerous in Education, Biology, and Social Sciences. Since the vast majority of all black recipients of doctoral degrees received those degrees from predominantly white institutions, information which would have permitted a comparison by race or by sex was not available. In all probability, a larger proportion of black males especially were enrolled in the Social Sciences than was true of the white group, while far fewer were in Engineering.

Valien (1967), who relied heavily upon Johnson (1938) and McGrath (1965), has provided some useful historical information about graduate education within the black institutions. According to Valien (1967), graduate education programs were established at Howard in 1919, at Fisk and Hampton in 1927, at Atlanta University in 1929, at Xavier University in 1933, at Virginia State College in 1937, and at Prairie View State College in 1938. By 1945, 14 black institutions had established programs. In 1944-1945, they conferred a total of 248 master's degrees. Also by 1945, there were two medical, dental, pharmaceutical, library science, and social work schools at black institutions, and one each in journalism and veterinary medicine. There were three law schools. In 1962-1963, 65 of the 163 professional units within these 89 senior black colleges were in the field of education, 17 were in griculture, 9 in business, 9 in home economics, 8 in nursing, 7 in theology, 6 in engineering, 4 in pharmacy, 3 in libary science, 3 in health and physical education, 2 each in dentistry, medicine, social work, and field services, and one each in art, architecture, drama, food administration, medical technology, public health education, and veterinary medicine. Of those 24 black institutions awarding a master's or doctoral degree, 8 were limited solely to the field of education, one was limited only to theology or religious education, and one was limited to education and home economics. Doctoral degree programs were available in biology and in counseling and guidance at Atlanta University, and in chemistry, English, government, history, pharmacology, physics, physiology, and zoology at Howard University.

In 1963-1964, a total of 408 master's degrees were awarded by these institutions. South Carolina State College awarded the highest number (83) of degrees in that year. However, in that same year, no more than two institutions (Howard and Atlanta Universities) had more than 50 fulltime graduate students. The 1965 Teacher Fellowship Programs of Title V-C of the Higher Education Act were instrumental in leading to the establishment of master's degree programs in Elementary Education at Fisk University, Elementary and Secondary Education at Howard University, Biology at Virginia State College, Elementary and Secondary Educational Media at North Carolina Central University, English and Elementary Education at South Carolina State College, Elementary and Secondary Education at Tuskegee Institute, English at Southern University, and Health, Physical Education, Recreation, Home Economics, Education, and School Psychology at Tennessee State University. Stipends were provided for the graduate students. Of interest to us within the present context is the impact of this funding upon educational and occupational opportunities for black women.

By sex, the graduates from the black institutions in the year 1968-1969 differed on both the bachelor's and master's levels from the larger population of all institutions. A large proportion of the graduates from all of the American institutions in 1968-1969 were male (56.3% on the bachelor's and 62.7% on the master's level). The majority of the graduates in the black institutions were females, due partially to the likelihood that males among blacks had greater and earlier access to the predominantly white institutions than did the females. Significantly higher proportions of the black collegiate graduates were found in Education than was true of the larger population: 63.8 percent of the females at the black institutions, as compared with 36.4 percent of females at all institutions, and 27.2 percent of the males at the black institutions, as compared with 8.8 percent for all of the males. Even on the master's level, this type of difference persisted. Here, 86.9 percent of the female graduates at the black institutions were in Education, as compared nationally with 52.4 percent of all females. For males, the comparative data were 67.7 percent at the black, and 27.4 percent at all institutions. These kinds of data lend further support to the observation that black institutions (and particularly the publically supported ones) conformed strongly to their traditional roles: training students for teaching or administrative positions within public education.

It has already been noted that the majority of the students in the student bodies at these black institutions providing graduate training were female. Yet, a majority of the students enrolled within those graduate programs were male. For example, in 1965, 52 percent of the 12,141 graduate students in these institutions were male. Also as earlier noted, it was not possible to obtain a sex breakout of all blacks enrolled in all institutions for graduate study. However, it may be noted that among all black graduate students, irrespective of specific institutional location, only 37 percent were single with no dependents. Less than half (about 43%) were enrolled in full-time programs, and 41 percent were in public institutions. About 73 percent were in universities, but far less than half (35%) were in institutions with a graduate enrollment size exceeding 2,000 students.

MYTHS AND REALITIES, A SYNOPSIS

The myths and realities surrounding black women and education are many. As suggested above, the most invalid ones are those which purport the educational superiority of black women in comparison with black men, as well as the more recent ones which purport the significant educational gains made by blacks (including women) over the past decade. The first of these invalid myths is dysfunctional not only because it is not true, but also because it unnecessarily heightens resentment and hostility between two race-sex groups with low educational achievement levels and statuses. The second is dysfunctional in that it is typically based upon measurements of quantity and not of quality, thereby avoiding the critical question of the usefulness of the education received for occupational trade-offs.

Hence, it is important to note how black women have utilized their education in general, and, even more important, to note the uses which have already been made of postsecondary education.

With respect to occupational utilization, most black female recipients of higher education have been active members of the American labor force. They have usually sought employment as soon as possible following graduation, and, despite the acquisition of new roles *such as wife, mother, club member, community leader, and grandmother), that involvement has continued until they have died or retired, with retirement caused by age or health factors. Those who have received postsecondary (but not senior college or university training) in fields preparing them for jobs largely within the clerical or the services occupations have also generally been active members of the labor force throughout most of their adult years. It would be interesting to determine whether the self-employed or the non-self-employed occupations promote longer working years among these women. For example, do women trained as beauticians spend more of their years as active participants within the labor force than do women trained as nursing aides? Unfortunately, such data were not available. Interesting data here as well would include the time differentials, if any, which these subgroups of women by specific areas of occupational training may experience between completion of training and initial job entry.

In any case, it is also clear and not surprising that the positive relationships between educational attainment and labor force participation among black women persisted over time. Those relationships were almost as strong among married women living with their spouses as they were among women living without spouses. In addition, comparisons between black and white college-educated women, which have stressed the stronger work orientation among black than white women, have indicated that black women are "somewhat more likely than white women to have majored in fields where the correlation between occupations and college major is strongest" (U. S. Department of Labor, 1969). While that generalization was apt in 1969, it should be subjected to reanalysis now.

Higher education also appears to be more strongly correlated to professional employment for black males than it does for black females, since a larger proportion of black males than black females employed in professional, technical, and kindred occupations had completed one or more years of college education over the past few decades.

The usual explanation for finding a larger proportion of married women living with their spouses in the employed labor force among blacks than whites is that of the lower average income of the black than the white husband. As already suggested, however, more information is needed on the precise motivational factors, and the weights which may be attached to them in explaining the racial variability. It could well be that the larger proportion of blacks among college-educated women could be better explained by such factors as their lower fertility rate, greater likelihood of direct relationships between their educational training and demands of the labor force in past years, and differences in the demand/supply ratio of segregated positions. An additional factor could also be the differential impacts their earnings would have upon their joint federal and state income taxes, in comparison with those of their white married counterparts. Another factor which requires controlling in any such comparison is that of the geographical mobility of the college-educated black and white female population both within and without the active labor force.

The contemporary status of black female higher education is that the vast majority have been and are being excluded from receipt of senior college and university education. Those who do receive such an education, generally coming from a higher socioeconomic level of the black population, most often receive a traditional and highly circumscribed education over which they have relatively little control, and are more often likely to have completed that education at a black state-supported institution which ranks below those of the most prestigious institutions of higher education within their states, within the hierarchy of black institutions, or within the hierarchy of American institutions.

Primarily prepared for public school teaching below the secondary level, and, to a less extent, for nursing and social work careers, most of these black female graduates of higher education in the past have sought employment within the aforementioned fields and continue, even in 1976, to seek such employment. An increasing number, however, with similar training, are now finding it difficult to obtain traditional employment, and are reaching out for other employment avenues, with or without the appropriate training background.

One implication of this chapter, then, is the need for further expansion of opportunities and results in postsecondary education for black females. For example, black females tend to stand in need of significant postsecondary education, including that beyond college, with the exception of Elementary and Secondary Education, and with additional thrusts in such areas as or, for that matter, who are already household or family heads, inasmuch as significant improvements in their educational levels will contribute towards significant improvements in their occupational and income levels, and reduce thereby the numbers dependent upon others for family support. For example, several or more institutions might develop family dormitories, with adequate personnel on hand to provide the necessary child care while the parents engage in postsecondary education. Pleasant cottage-type or even high-rise surroundings, with adequate recreational facilities for the children, would be quite encouraging.

More black families should be encouraged to continue their education beyong college. This calls for the greater provision of scholarships and other forms of financial assistance to them. It also calls for reduced racial and sexual discrimination in admission policies in those institutions conferring graduate or professional degrees. Further, it suggests that in those types of institutions and elsewhere, where applicable, the Federal compliance efforts must be modified in such a way, so as to avoid counting doubly black females. That is, instead of requiring federal contractors to meet certain quotas or goals with respect to blacks, and certain quotas or goals with respect to women, which permits the double counting of any black female, to the extent that those quotas or goals are required, they should be more specific with respect to each appropriate race-sex group. Therefore, there would be certain quotas or goals related to black men, certain quotas or goals related to black women, certain quotas or goals related to white women, and so on.

Considerable expansion in the nature and content of education usually received by black females is also immediately desirable, notwithstanding some of the welcomed developments over the past few years. There must, of course, be a decrease in traditional and an increase in non-traditional fields. Education for black females must be more provoking. It must concentrate more nearly upon greater preparation for leadership, for critical thinking, and for feasible ways of combining the various roles which these women are likely to play or could play. Black females should have increased access to the most prestigious postsecondary institutions than is the case today.

The critical issue of the continued segregation, by and large, of the black public institutions of higher education in the Deep South must be considered. Should we advocate strongly their dissolution, with the provisor that the remaining state-supported institutions must continue to admit to their institutions those student-types considered acceptable for admission to the previously black state-supported institutions until the educational factors which made a difference in their earlier education by race in years past has been removed? Or, should we follow the lead of those blacks who believe that black institutions are needed for developing more fully black leadership, and those of white women who believe that institutions restricted to females are needed for developing more fully female leadership? If so, then we could very well argue for the development of colleges and universities specifically set aside for black females, where the dominant sex of the administrators and faculty, including the President, would be female. Thus, we would not support Bennett (Greensboro, North Carolina) and Spelman (Atlanta, Georgia) Colleges in their present form, since they provide inappropriate models on the top levels for developing female leadership.

Also, inasmuch as public school teaching within the South no longer constitues a safe haven for black female graduates in Education, greater attention must be given to the continuing expansion of occupational positions for which appropriate training could be received on the undergraduate, junior college, or vocational level. As only one example, a number of black females major in Sociology at various black senior colleges and universities. They graduate knowing full well that they do not intend to pursue further education immediately after graduation, in the near future, or, in some cases, not at all. Yet, many find that they cannot obtain positions as sociologists, a fact which should have been obvious to them prior to their undergraduate graduation, since individuals possessing only a bachelor's degree in Sociology are not considered as sociologists on a professional level. However, many more of them could obtain positions as research technicians and assistants if they had undergraduate credit in mathematics and statistics to a much larger extent than is required in the currently typical curriculum for them.

The development of expanding employment for black women possessing only a bachelor's degree will also be helpful in reducing much of the controversy surrounding the issue of "Who can best teach whom by race?" since that issue, notwithstanding its other implications, is also overwrought with economic considerations: blacks have vested interests in maintaining their few opportunity havens, while whites have vested interests in reducing further professional occupations available to blacks.

At the moment, it also seems quite probable that black female recipients of postsecondary education will continue to seek employment within the labor force in significant numbers, while they may well be a decrease in efforts to seek employment among black women who have not finished at least high school. Hence, the occupational utilization of black women with postsecondary education will be a function of the opportunities which open to them and which they force to open up to them. Subsequent diversification within their higher or postsecondary education should also be accompanied by significant changes within the occupational systems, which is one of the reasons why it is very important that black professional women involve themselves in movements designed to expand employment opportunities for women.

Whatever types of differential value judgments may affect any reader's criticism of the foregoing, it should be stressed clearly that the increasingly disproportionate number of black children being reared in poverty could be reduced substantially if the society only raised the educational levels of black women, and the prevailing patterns between level of education and employment continued. At the same time, it may be well to make a plea that the fertility rates of black college-educated women be at least enough to reproduce themselves in the years ahead, while those of the lowest-educated women, perhaps, be reduced to a number that they can support. Such a plea also necessitates strong support for abortion laws permitting some federal financial assistance to women who may wish to abort, but do not themselves have monies to pay for their abortions. The most critical point here is that the higher the educational level of black women, the lower their fertility rate, and the greater the dependency of their minor offspring upon them only, or upon them and their mates only, for fulfillment of familial functions obligated by society.

There is obviously a need for a critical study of important relationships between education and work for black women of varying educational levels, since the events of the past four or five years have had a profound impact in changing certain directions which were more prevalent or common in earlier years. Yet, of course, some of the trends present throughout this century also remain. The shifts in time, once again, need to be established, and the continuing trends need to be well-documented.

There is also an obvious need to examine the employment outlooks in the United States over the next decade, as well as some of the recent literature which may provide additional information about improving the positive relationships between education and work for black women. These are the concerns of the next two chapters.

CHAPTER FIVE

EMPLOYMENT OUTLOOKS THROUGH THE MID-1980'S

The Occupational Outlook Handbook, 1974-75 Edition, prepared by the Bureau of Labor Statistics, U. S. Department of Labor, is a very useful work in providing some indication of the types of existing occupations within the labor force of the United States. It also provides helpful information about the qualifications necessary for entry into those positions, and the employment outlook for those positions through the mid-1980's.

It is useful to examine this work in conjunction with any position paper or monograph on career options for black women for at least three reasons. One is that the current occupational distribution of black women within the civilian labor force can be compared with the types of occupational positions which are listed within that work. Secondly, the types of qualifications typically required for entry into various occupations, and especially the background characteristics which they tend to share in common, can be compared with the types of background characteristics most typical of black women, as well as with the types of background training most often available to black women on the elementary and secondary educational levels. Finally, the employment outlook is useful in recommending types of training programs which should be supported by any Local, State, or Federal government interested in improving career options for black women, as well as in giving black women on an individual basis some idea of the types of qualifications and employment outlooks which have been predicted through the mid-1980's.

In general, entry into the labor force increasingly requires at least completion of a high school education (or, less often, its equivalent), with satisfactory performance in language arts, mathematics, and science courses. More stress is being placed upon the capacities to work independently *and* to work as a team member. Frequently, one position requires both of these skills. Many positions require reasonably good to above average physical and mental health conditions as well. Many also atress the ability to concentrate upon details, to make good judgments, and, for advancement, to continue to update one's familiarity with one's specific field, which can be done on a formal or informal basis, depending upon the nature and type of the specific position. The most important point here, perhaps, is that continuing education is becoming a vital part of most occupations available within the labor force. Continuing education can be provided through on-the-job training, in-service training, or in formal settings where the individual has received release time from the job.

Table 19, which appears in Appendix B, is based upon data obtained from the *Handbook*. It shows the 1974-1975 predictions of training and other qualifications and employment outlooks for selected occupations in the United States through the mid-1980's. The reader may wish to examine it in some detail before proceeding here.

Most of the types of occupations listed under *Industrial Production & Related Occupations* in Table 19 (Appendix B) are positions which have typically been closed to black women. These are positions which are most often acquired through formal or informal apprenticeship programs. They have also been regarded as male work. In general, training programs for black women can be developed provided that the training programs are undertaken in coordination with industries hiring these types of workers. They typically require individuals with high school education, mechanical ability and interest, and manual dexterity, and good health. Some of the positions, such as motion-picture projectionists, could be acquired by women who enter theater employment as ushers. Entry into these positions suggests the need for greater stress upon courses in mathematics (especially algebra, geometry, trigonometry, and even calculus) in high school, as well as in shop, English, and other related courses.

Clerical Occupations, of course, represents one of the fastest growing areas of employment for black females over the past decade. Again, at least the completion of high school education, with the development of good communicative and arithmetical skills, is necessary. In addition, these types of positions require the development of personality skills which are conducive in dealing with co-workers and with the customers one serves directly or indirectly, with advancement being largely dependent upon experience and additional training beyond the high school level. Of especial interest is the projection for rapid increases in such areas as cashiers, hotel front office clerks, receptionists, stock clerks, stenographers, secretaries, and typists.

Of particular interest to black women who may begin preparing for such career options during their elementary and secondary years of formal education is the need for further development of good communicative skills.

In a number of instances, this writer, at least, believes that the stress placed upon "Black English" as a natural language has obscured the need for many black youth to increase their competence as users of Standard English. Tye typical arguments or controversies about "Black English" and Standard English become irrelevant when the language training is linked to "what it will buy" within the labor force. For example, a number of black females who have learned to type relatively well in high school or business school find themselves still unemployable within clerical occupations because they do not possess sufficient command of the English language to accompany their typing skills. Such observations as these suggest the need for improving language competence in Standard English, so that black females, where necessary, will at least be given the option to use or reject the use of Standard English themselves, instead of having to be rejected by potential employers because they do not know Standard English. In this context, one could well question the ulterior motives of those whites in the 1960's, in particular, who were Federally funded to further their theories that "Black English" did exist, and was merely a different language than Standard English. What could also be questioned is the typically greater generosity in funding such research studies than in the actual monies which were put into educational programs to increase black competence in using Standard English (see, Baratz and Baratz, 1970, for further enlightment upon this issue).

Under Computer and Related Occupations, of especial importance is the anticipated decline in the employment opportunities for keypunch operations, with rapid increases expected for programmers and systems analysts, where postsecondary education, and increasingly graduate training, is essential. Some shift from black women training as keypunch operators to training as console and auxiliary equipment operators will be helpful on a group basis.

The Banking Occupations are expecting rapid increases in the need for bank clerks and tellers, positions typically requiring high school education, accompanied by the usual traits of clerical and arithmetical skills, effective human relations and communicative skills, dependability, and reliability. Also, there will be a rapid growth for bank officers, where a college education is required most often, with appropriate background courses generally being quite similar to those suggested for employment in the Insurance Occupations as actuaries, claim adjusters, and underwriters. Of especial interest, here, is the fact that high school graduates with good records and experience in clerical work or some college training are frequently employed as claim examiners.

The minimum educational requirement for positions listed under Administrative and Related Occupations is a bachelor's or professional degree, with the trend going toward terminal degrees for most such positions.

The only job listed under Service Occupations for which a rapid increase in the number of workers needed is predicted is that of exterminators. Although an increasing number of employers are beginning to show preferences for high school graduates, largely as an indication that the individual applicant has shown an ability to complete a program, most of the positions within this area do not require high school education. Many of the skills are learned informally on the job. Many of them, however, do require appropriate openings which will allow for helpers who can learn informally. And, some of these occuaptions, such as bartenders, cooks, and meatcutters continue to require a gradual shift in the traditional way of classifying them as male positions.

Most Personal Services Occupations, such as barbers and cosmetologists, require state licenses, and most, but not all, require completion of at least a high school education prior to entry into a formal training program. As an aside, perhaps a number of black women employed in these positions could improve considerably their net income if they either received or used effective business-management, business-inducing, and good customer relationship training. This is not to single out black women for such training, since many of them are outstanding exemplars within their fields. However, many other women are not. Therefore, such women or their later counterparts could benefit from formal training in these areas. For example, a number of waitresses could probable increase the amount of their tips by improving the service they offer. Or, income could be multiplied in many black beauty shops (and again, not all) if the owners and operators practiced better business development, including good customer relationships. For example, a number of such businesses still operate under obsolete systems which worked well some decades ago, but which are no longer functional in today's world. Many, of course, do not expand their business operations due to a lack of front capital, tied in, at least partially, to the general lending practices of bank and loan agencies which have typically discriminated against blacks and women. But, we could suspect that those beauticians who improve the physical appearance of their shops, who increase the variety of services available to their customers, who reduce the waiting periods customers are often forced to endure, and the like, could well expand their operations in profitable ways. This is probably much less of a problem in large metropolitan areas, and much more of a problem in businesses operating with smaller populations, due to the differential competitive factor.

Although a variety of governmental training programs have been instituted for the category of Private Household Service Occupations, generally no formal educational requirements exist for entry into this area. But, the increasing technological sophistication within the household, as well as the increasing variability in sociocultural backgrounds of those employing private household workers, suggests the need for more informal or formal short-time training programs. Some problems involved here also include the increasing tendency toward at least a recognition of the need for unionization among private household workers. Problems, too, are conflicts which occur or which can occur between employers and employees over the reporting of earnings to the Social Security Administration, since some individuals suffer losses through income transfers, as in the case of food stamps, when the total income is reported, and will, thus, refuse to work under such conditions. However, many--but not all--of their employers or potential employers cannot afford to hire them unless all of the earned income is reported. Otherwise, they will lose the tax credits which ensure under certain employment conditions. A more basic problem here is that the typical earnings of many women employed outside the home are insufficient to support the minimum pay required for private household workers.

Most of the Protective and Related Service Occupations listed, with the exception of telephone operators, have generally been confined to male applicants. However, over the years, there has been some breakdown, as evidenced by the increasing employment of women as mail carriers, police officers, et cetera. Therefore, women interested in these types of occupations should be encouraged through training programs which aid them to pass the required tests to enter these occupations.

The occupations listed under Education and Related Occupations typically require at least a bachelor's degree, and, increasingly, most will require either a master's or doctoral degree. The employment outlook for kindergarten, elementary, secondary, college, and university teachers is relatively dim. That is, largely replacements will be required. Consequently, individuals who prepare themselves for these types of positions should also prepare themselves to face relatively keen competition, and, in addition, have something to fall back upon in case they are not sufficiently competitive.

Within the area of Library Occupations, the outlook is largely for replacements, but individuals who possess the necessary educational and other qualifications should not be discouraged from training and seeking employment in these areas.

Moderate to rapid increases are anticipated for Sales Occupations, such as Automobile Parts Countermen, and Construction Occupations, such as carpenters. Many of these types of positions, such as retail salesclerks, have been or can be readily filled by women, provided that meet the necessary educational and personality qualifications. Much of the training can be acquired in high school or on-the-job. Consequently, more career options should be available within these areas, provided that black women take the opportunity to obtain the necessary qualifications.

Within the Transportation Occupations, rapid increases in demand are expected for such positions as air traffic controllers, aircraft mechanics, flight attendants, flight engineers, pilots, copilots, and traffic agents and clerks for airlines. Various educational qualifications are necessary for these differing positions within the airline industry, but entry as a traffic agent or clerk is possible with only a high school education, provided the individual applicant possesses a good speaking voice, good appearance, good personality, and other necessary qualifications for effective job performance. The Merchant Marine and Railroad Occupations are in decline, so it is probably not particularly feasible to encourage black women to enter these types of positions at this time. However, although the Driving Occupations also typically show a projection for largely replacements or a slow to moderate increase, it is useful to motivate black women with the appropriate qualifications to seek employment within these areas. Training programs should be directly related to job openings. That is, individuals typically interested in these positions, with probable exception of taxicab drivers (depending upon one's location) should typically seek training from the employing agency, such as the local bus lines system if one wishes to drive an intracity bus.

Scientific and Technical Occupations should be increasingly available to competent black women possessing the necessary educational, experiential, and other background characteristics. Consequently, for example, there is a need to study carefully the types of undergraduate programs in which black women typically enroll at predominantly black and predominantly white institutions, as well as the factors which tend to promote their choice of majors. There needs to be some encouragement for greater undergraduate and graduate enrollment in nontraditional areas. Some of the positions which show projections of rapid increase in the need for workers over the next few years include those of forestry aides and technicians, soil conservationists, agricultural engineers, civil engineers, electrical engineers, industrial engineers, metallurgical engineers, geophysicists, oceanographers (for those holding the Ph.D.), life scientists with the terminal degree, and physicists (with the terminal degree). As expected, Technician Occupations related to the aforementioned type of scientific occupations also show projectsion of moderate to rapid growth. A rapid increase in demand is also anticipated for such technicians as air-conditioning, refrigeration, and heating mechanics, appliance servicemen, boat motor mechanics, computer service technicians, diesel mechanics, and business machine servicemen.

Several areas which may be of especial interest to black women seeking employment who are without college education are those of dispensing opticians and optical mechanics, where high school education is required; jewelers, locksmiths, and piano and organ servicemen, where high school education is only preferable; and shoe repairmen, where individuals are largely hired as helpers, typically without regard to formal educational training, and learn from experienced shoe repairmen.

One of the most rapidly growing business within the United States is that of health, with even greater growth prospects anticipated for most positions below those of physician or dentist if health care is extended to a larger proportion of the population as an automatic right than is presently the case under Medicare and Medicaid. Among the professional areas where the demand is still greater than the supply, and especially among blacks, is that of dentistry. More black dentists are needed. Increasing technological sophistication within the area has reduced any differentials formerly made between physical strength requirements by sex. In other words, there is no reason whatsoever for not encouraging women to become dentists. Some few women, of course, already are dentists. According to the Handbook, individuals desiring to become full-fledged dentists need manual skills, a high level of intelligence, good visual memory, excellent judgment of shape and space, delicacy of touch, a high degree of manual dexterity and scientific ability, ability to instill confidence, good self-discipline, and a good business sense. But there are a number of black females in high schools with these types of characteristics, or the potential to possess such, and there should be some encouragement, beginning at least with junior high school occupational programs, to encourage some black females to join the few black females who are already employed as dentists. Related positions which show good employment outlooks are those of dental assistants, dental hygienists, and dental laboratory technicians.

While the employment outlook for medical practitioners is highly dependent upon decisions which may be made by the Federal Government about health insurance programs, et cetera, the overall impression given by the Handbook is largely that of a need for replacements. However, before concluding this section, we shall dwell briefly upon the need to distinguish between employment outlooks projected irrespective of color and sex, and those which may be projected for individuals precisely because of their color and/or sex.

In any case, technological and assistantship positions within the medical world do show favorable prospects, especially so for electrocardiograph technicians, electroencephalographic technicians, medical assistants, medical record technicians and clerks, operating room technicians, optometric assistants, and respiratory therapists. The formal training for all of these positions is typically received on-the-job, although some programs within vocational or junior college institutions are available.

Within the related area of Nursing Occupations, rapid growth needs are expected for licensed practical nurses, nursing aides, orderlies, and attendants. Within the area of Therapy & Rehabilitation Occupations, rapid increases are also expected for most of the relevant occupations, and especially so for physical therapist assistants and aides.

Other Health Occupations where increases in demand are expected include dietitians, medical record administrators, and sanitarians.

In general, the employment outlook for Social Scientists is not particularly favorable, with the exception of that for Anthropologists and Geographers. However, relatively few positions are typically available within these areas. Here, the favorable outlook is projected only for those with the doctoral degree. Generally keen competition is expected, even on the doctoral level, for individuals in Economics, History, and Political Science, and, among Sociologists, there will be keen competition for the choice positions.

Among the Counseling Occupations, it is difficult to predict with any degree of certitude the employment outlook, due to the necessity to rely heavily upon actions of the Federal Government in the areas of education, health, and related areas. However, the outlook tends to be relatively favorable for rehabilitation counselors, and perhaps less so for school or employment counselors.

Among Clergymen, largely replacements appear to be needed for the Protestant denominations, but the demand is expected to be greater than the supply for rabbis and Catholic priests. However, inasmuch as a significant proportion of blacks belonging to religious denominations belong to those which are black, such as the African Methodist Episcopal or the African Methodist Episcopal Zion Churches, it is difficult to anticipate the employment outlook based upon data available in this Handbook. My own belief is that most black-controlled denominations are even more conservative than many whites in terms of norms held about the appropriate sex of a minister. If so, there will be proportionately fewer openings within black denominations for black female clergypersons over the next decade than will be true among whites. However, an increasing number of ancillary or auxiliary positions will be available, depending upon the economic circumstances of predominantly black institutions or agencies. For example, if black state-supported institutions of higher education maintain Departments of Religion, then it is probable that an increasing number of such institutions (as federal contractors) would have to employ women in order to comply with affirmative action.

Among the remaining occupational categories which are listed in Table 19 (Appendix B), it should be apparent that rapid growth is anticipated for such positions as those of recreation workers, social service aides, floral designers, landscape architects, and newspaper reporters with unsually good writing talents.

Again, Table 19 (Appendix B) is useful in providing some indication of the anticipated growth and retrenchment patterns in occupations through the mid-1980's. Yet, it may be of less help specifically to black women, unless other types of sine qua non data are also provided. As an example, it would be helpful if the National Institute of Education encouraged the Bureau of Labor Statistics to prepare employment outlooks for particular race-sex groups in light of additional and interacting information, such as the probable likelihood of enforcement of compliance regulations related to the hiring of blacks and other minorities by the Federal Government, and in light of the probable courses various unions (and especially those controlling entrance to apprenticeship programs) may take. This is a problem at the present time, as well, in view of the issue of seniority on the job as it conflicts with goals or quotas for minority hiring. The absence of this type of information makes it somewhat difficult to develop formal training programs of a short-range nature for black women in specific localities, since the training may be obsolete before the training program is completed, either because no job is in sight or because the training program itself was not operated with appropriate support and input from the industry involved, or for which the training was given.

But, on an individual basis, it is still useful to begin introducing various career possibilities to black females at an early point within their formal, compulsory educational years, and to continue such training at least through their high school years. Then, although there are a number of positions where the anticipated outlook is merely for replacements, the number of replacements needed varies tremendously. Hence, black women interested in specific occupational slots should not be misled by employment outlooks which stress a need primarily for replacements, but should investigate carefully the qualifications usually required for replacements, including the most frequent forms of entry. A similar suggestion was implied in the case of replacements for preschool, elementary, and secondary teachers in the preceding chapter.

In a related vein, in a pilot investigation undertaken some few years ago by this writer of the patterns of instrumental and affective relationships between older black women and their adult children, one finding showed that the adult female children of the younger women whose major lifetime occupations had been those of private household workers were far less likely to receive assistance with employment from those women than were their somewhat older counterparts within a given Southern city. Further investigation indicated that variables affecting the decline in the generational transfer of private household work among these women and their female offspring included the greater geographical mobility of their employers, greater use of the local Employment Service, and reduced on-the-job training which the female children had received from their mothers during their mothers' working years. These types of findings are related to the changing context in which adult parents function as work models for their children. They also raise questions of appropriate substitutes for individuals familiar with the world of work when occupational distributions shift so that previously effective role models are no longer appropriate.

The reader may wish to reexamine Table 8 (pages 68-79). That table, it may be recalled, provided some information about the 1970 distribution of black women in various occupational categories. An examination of that table, in conjunction with Table 18 (Appendix B) may raise issues directly related to the career options for black women under the Education and Work Section of the National Institute of Education. Two obvious issues may arise within the reader's mind immediately.

One is the need for careful research about the background characteristics of the black women who are within non-traditional occupations, as well as the paths which they followed to reach those occupations.

The second is the need for research which may lead to relatively valid predictions about the demand for black women within those non-traditional occupations, such as those of tool and die maker or airplane pilot, throughout the remaining years of this century, and, if this demand is likely to be insufficient, to then examine ways in which the demand for black women within those non-traditional occupations could be increased. For example, is additional affirmative action necessary? If so, in what ways should affirmative action be modified? Or, is additional training of black women within those occupations helpful? If additional training is helpful, how could the National Institute of Education contribute toward that training?

While Chapter Six does not answer precisely those types of questions, it does deal in some detail with relationships between career options for black women and the National Institute of Education.

CHAPTER SIX

CAREER OPTIONS FOR BLACK WOMEN and the NATIONAL INSTITUTE OF EDUCATION

This chapter is primarily concerned with relationships between career options for black women and the National Institute of Education. It begins with an overview of the National Institute of Education, as set forth by Harold L. Hodgkinson (1976), who, at this time, is the Institute's director. Information about the education and work program (formerly the career education program) of the Institute for the fiscal year 1975 is then presented. Assorted literature in the social sciences and education is also reviewed, with the most impressive conclusion being the paucity and fragmentation of that literature as it relates to career options for black women. Finally, some critical concerns are summarized, which, in turn, lead to Chapter Seven, the chapter containing recommendations about improving career options for black women.

NIE OVERVIEW

According to Hodgkinson (1976), the National Institute of Education, which was created by Congress in 1972, has a four-part mandate: it has "the leading Federal responsibility for studying the most critical problems in education and helping teachers, school administrators, and education policymakers determine the most promising solutions and apply them in the schools" (Hodgkinson, 1976:13). The five areas upon which concentration is placed are basic skills; educational equity; education and work; school finance, productivity, and management; and the dissemination of research results and innovative practices.

Hodgkinson (1976:11), who believes that "Research and development is one of the most misunderstood and neglected elements of American education," detailed some of the troublesome situations confronting our educational system and related institutions, one of which is especially worth noting:

> ...more and more students of all ages are questioning the real worth of education. Where, they ask, is the motivation to do well in school, to acquire postsecondary degrees, when a street sweeper in California makes $13,000 a year and an assistant professor in that State's college system makes $12,500? It's become obvious that education is now only one of a number of routes to economic security (italics added).

He underscored the importance of science in investigating educational problems by stressing that their partial resolution is dependent upon "a systematic, national effort to examine problems scientifically, develop and test solutions, and see to it that the final results reach those who can make use of them" (Hodgkinson, ibid). Recognizing fully the critical differences between scientific research in the social and the natural sciences, Hodgkinson (1976) also stressed the need to study the school within--and not apart from--the constellation of institutions with whom it shares responsibilities for the total development of individuals, as well as the need for identifying clearly the school's latent and manifest functions. He believes that research and development within education must be linked with "the world of practice."

Finally, in conjunction with our present task, it should be noted that Hodgkinson, 1976:13) emphasized that within the next few years, the Institute

> ...should also have a much better idea about at what stage of their lives people make career decisions, and what triggers those decisions. People used to think that, at age 18, a high school student would magically decide to be a doctor or a lawyer or a garage mechanic. Now it is clear that career possibilities are bouncing around in people's heads almost from birth; this makes it very important to know more about the whole sequence of events that produces a career decision. Regardless of whether it's at age two or 55.
>
> Finding the solutions to these and other problems will not, of course, make education perfect, or even as good as it should be. I don't believe that will happen until some kind of common vision for the education system as a whole is developed. I am, however, convinced that the vision may be just around the corner, and that it will be based on the provision of a quality education for every American regardless of age, race, or sex.
>
> We have at our disposal today the technical and economic means of making it a reality. And right now we are gathering the knowledge needed to put that vision into effect. It's a matter of choosing to do so and committing the necessary resources to the effort.

Considerable knowledge, of course, about the interactional effects of the family, the educational system, and the economic system is yet needed to improve substantially that type of vision for black women.

NIE EDUCATION AND WORK PROGRAM

A primary conception underlying the Education and Work Program is the need to increase the preparation of students for the adult world, and, more specifically, for the world of work. The central question involves the extent to which education can and does "affect an individual's ability to find, get, and hold a job and to progress in the career that he or she chooses" (NIE, 1975:1). Yet, although the Education and Work Program is interested in obtaining scientific answers into this question, as well as aiding individuals and groups in the effective use of those answers, the Program itself is not clear in its own definition of career education.

The Program defines career education essential as a new innovation in education which concentrates upon educational improvements that "help people make a commitment to meaningful work for the benefit of themselves and others." It also helps them to "make informed, realistic decisions about career goals and the education needed to reach them," as well as to bring them "in contact with a variety of occupational settings and roles for purposes of career exploration and the acquisition of general and specific skills." In addition, career education should "greatly expand the options through which individuals can reach their educational goals in terms of the variety of programs available, locations where education takes place, way in which education is delivered and times when education is offered." It should also "improve ways to give financial aid for people who do not have adequate resources to begin or continue their occupational development." Further, it should "bring academic and occupational curricula closer together and link educational providers from K through adulthood with each other, with the community, and with the workplace, creating a genuine partnership in the educational task." And, finally, it "may change the roles of schools to planners and managers of the educational growth of individuals, using a full range of societal resources," and "improve economic production and social service through better matches between individual talents and societal needs, and increased awareness of how our economy functions and of the importance of human resources" (NIE, 1975:3).

Herr's (1972) definition of career education varies somewhat from the above, in that he is far more cognizant of the historical roots of career education. Thus, for him, career education may be conceptualized as the synthesizing and blending of a number of concepts and elements available at earlier points and in various places throughout much of American education. What is being sought by the Federal Government in career education for him, then, is a "new and systematic interrelationship among vocational education, vocational guidance, career development, and other elements of the educational and community network of which they are a part" (Herr, 1972: 8).

Herr (1972:8) also describes the three basic models which were developed by the Office of Education for career education. One is the School-Based Comprehensive Career Education Model. At the time he wrote, it was being administered by the National Center for Educational Research and Development. Emphasis was being placed upon the self-concept development, oriented toward work. That is, individuals were to be aided in developing positive attitudes about work, school, and society. Successful experiences within these areas should lead to satisfaction, including self-satisfaction. Therefore, it was important to develop adequately such personality characteristics as self-respect, self-reliance, perseverance, initiative, and resourcefulness. In addition, individuals should have realistic perceptions and understandings of the work-education relationship, as well as a comprehensive awareness of the various career options within the world of work.

A second is the Employer-Based Career Education Model, which was then being tested in a consortium containing the Research for Better Schools in Philadelphia, and the Far West Laboratory in Berkeley, as well as by the Center for Urban Education in New York City. Primary goals included the provision of alternative educational programs in employer-based settings for students between 13 and 18 years of age. The strengths of the academic, general, and vocational curricula were to be unified in a comprehensive career education program. Participation in individualized and self-directed learning programs should aid in the development of a strong self-concept. The program should increase the relevance of education to work and simultaneously expand the community participation base. Educational experiences occurring within non-traditional settings were to be emphasized. A guidance system capable of active mediation between the students and their tripartite environments of work, education, and the community was to be designed.

The third was the Home/Community-Based Model, which was then being studied by the Education Development Corporation, Newton, Massachusetts, and by Rand Corporation. The primary goal here was the development of educational delivery systems which would reach into the homes and the communities, and which would provide new career educational programs for adults. In addition, emphasis was to be placed upon the development of a guidance and career placement system which could assist individuals in their occupational and occupationally-related life roles. The overriding goals were those of increasing the number of competent workers for the labor market, and of enhancing the quality of the home as a learning center.

The definition of career options employed in the present work is more comprehensive than that employed by NIE (1975) and Herr (1972). Perhaps the most critical difference is that this definition of career options does not exclude higher education and the professions. By implication, at least, the NIE (1975) definition of career education excludes these areas, as in its justificatory statement that:

> ...youth and their parents are concerned that educational reforms give as much attention to preparation for career development as schools traditionally have given to preparation for professional and higher education (NIE, 1975:1).

Herr (1972:8) believes that "career education represents the institutionalization of career development and the marrying of it with occupational education."

Many legitimate or politically feasible reasons probably explain the conceptual definition of career education, or of education and work, developed by the Program. However, it could also be that the continuing pattern of program overlapping and program fragmentation, with various agencies having similar responsibilities for similar individuals may not be the most feasible approach to improving, at least, career options for black women. Hence, consideration should clearly be given to reconceptualization of career education by the Program.

It was also noted that NIE was moving toward the goal of more precise identification of the realistic effects of education upon such phenomena as career choice, career entry and career progression. The stated philosophical bases included believes that education could and should aid individuals in the identification and development of general and specific skills needed for various occupations. Education could also assist individuals in the acquisition of skills needed for good planning and management of their occupations, including further their knowledge of current and future career opportunities, and the means to obtain their current and future occupational goals.

The two major goals undertaken by the Program were those of (1) increased understanding of the education-work relationship, and of (2) increased contributions by education to "individuals' abilities to choose, enter and progress in work that is beneficial to themselves and others" (NIE:1975:9). The six specific strategies adopted for reaching these goals (for which, incidentally, no timetables were set) were as follows (NIE:1975:9):

> Our first strategy is to investigate through research the nature of the relationship between education and work, and to reassess through policy and planning studies the strategies and activities recommended for strengthening that relationship through program development....

> Our second strategy is to design, develop and test guidance, counseling and placement programs that can be utilized by practitioners to assist youth and adults in entering and progressing in careers, and to disseminate effective models to practitioners and administrators.
>
> Our third strategy is to design, develop, test and disseminate career education curriculum materials to be used by students and teachers in schools to provide information and experiences that will facilitate better choices and entry into chosen fields.
>
> Our fourth strategy is to design, develop and test alternative ways of providing financial support to youth and adults for purposes of career development.
>
> Our fifth strategy is to examine through studies and experiments the extent to which alternative educational settings serve different Career Education needs and improve the individual's ability to enter and progress in a career.
>
> Our sixth strategy is to develop, test and disseminate systemic or institutional changes to improve the Career Education delivery system.

Although the developers of the Program certainly considered the heterogeneity of the population, little or no specific attention was directed toward potential target groups, such as the various target subgroups within the population of black women. In addition, it appeared that strategies two through five would be tackled without awaiting findings from strategy one. That is, one can question the efficacy of proceeding with the remaining five strategies if they were to be related to the causal and correlational relationships between education and work. On the other hand, however, one could argue that simultaneous or even a priori pursuit of the fourth strategy, or any of the remaining ones would be appropriate, inasmuch as these strategies are related to different components of career education.

In any case, NIE (1975) also listed various funded projects, all of which, presumably, tied in with the Program's missions. If one regards black girls and women as a special race-sex group in that their race-sex status has a differential impact upon the relationships between work and education than for other groups, then, it becomes questionable if the particular projects will be extremely helpful in understanding components of that work-education relationship for them.

However, a number of these projects should be promising, and their results should be examined carefully by NIE for additional leads. These projects, listed below by title only, are as follows:

(1) Making a Choice: Understanding Career Decision Making
(2) A Policy Study in Education and Work: Job Satisfaction
(3) A Policy Study in Education and Work: Underemployment
(4) Career Counseling and Guidance for Home-Based Adults Project
(5) Career Planning Support Systems
(6) Women: Issues of Career Guidance and Vocational Counseling
(7) Use of Interest Inventories
(8) Development of a Career Education Occupational Exploration Program
(9) Methods for Curriculum Content Derivation

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ABSTRACT

The specific problem conceptualized for this position paper was that of deriving inferences from statistical data which permitted some determination of the probable effects of recent federal policies and programs on the career options of black women, and, along with other relevant data, to develop a set of recommendations concerning the types of policies and programs which best aid black women in using and improving their career options. In addition, three issues (competent education, traditional female roles, conflicting minorities) are examined as they relate to the current efforts to aid black women. Myths and realities about occupational, familial, and educational statuses of black women are discussed in detail. Employment outlooks for 17 occupations through the mid-1980's are discussed. Career options for black women and the National Institute of Education (NIE) role are examined; recommendations are made which focus on the major concerns and strategies of the Education and Work Section of NIE as they relate to black women. It is concluded from statistical data that federal policies and programs had insignificant, weak, or moderate impacts on career options for black women. It is also noted that the survey of related data tended to confirm the general paucity of empirical data about the relationship between schooling, family, work, and income for black women, thereby leading to the overriding recommendation for a massive research undertaking of this type. Tables are included for 1974-75 predictions of training and other qualifications, and employment outlooks for selected occupations (66 pages). (TA)

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CAREER OPTIONS FOR BLACK WOMEN

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DUKE UNIVERSITY

1975 - 1976

Prepared for the Education and Work Section of the National Institute of Education

PREFACE

The 1960's and the 1970's have been pregnant with various policies and programs for social intervention. Many of those policies and programs were specifically aimed toward the goal of upgrading the socioeconomic statuses of black women. However, most of those policies and programs have yet to give birth to significant upgrading of the statuses of black women.

One complication has been the general dearth of knowledge and understanding about the crucial relationships between the variables of family background, schooling, work, and income as they relate to black women. In addition, the effects of race and sex which linger even when appropriate controls are established for family background, schooling, work, and income are often overlooked. Some have claimed that black women have been most favored by the social intervention policies and programs of the 1960's and the 1970's, in that they benefitted by being both black and female. Sadly, however, the data rarely support those assumptions. Others have claimed that the relative position of black women in the educational and labor markets, in comparison with their other major race-sex groups, has generally remained constant. The proponents of the latter group are often more nearly correct on the basis of available data.

The Education and Work Section of the National Institute of Education is interested in determining the type of role it might play in fostering greater career options for black women, which, presumably, which contribute toward the upgrading of the individual and collective statuses of black women.

That Section is particularly interested in determining the leads and cues which can be culled from existing literature, or from other sources, which may be helpful in charting goals and strategies for the improvement of career options for black women. One of the problems, of course, is the determination of the emphasis or weight which should be placed upon education as it relates to subsequent career patterns. Another problem is the amount of emphasis which could be placed upon family background as an antecedent to schooling and occupational achievement. A third problem is the definition itself of career education or of career options, a problem which is partially confused by the Federal tendency to create overlapping agencies, and to avoid encroachment upon certain obligations designated to the States.

There are many other problems, of course, but the most serious problem is the need for the Education and Work Section of the National Institute of Education to seek highly valid and reliable models about the aforementioned variable relationships, so that the policies and programs which it may develop and implement in the future will have a sound basis.

Consequently, although a variety of information is examined and discussed within this monograph, the major recommendations center upon needed research, which should be undertaken by the best students of social stratification within the United States. The best models for undertaking such research fall within the tradition established by Peter Blau, Otis and Beverly Duncan, William Sewell, and their associates.

Such a comprehensive and national study is urgently needed, so as to reduce the current growing pains being experienced by those who seek to aid black women.

Some individuals may well disagree with the recommendation, on the premise that the needs of black women are too urgent to await additional research. However, I hope that those who are seriously concerned about improved educational, occupational, and income statuses for black women now and in the future will recognize and support fully the need for the establishment of a sound data base, from which appropriate models can be derived, and which, in turn, will aid in the setting of solid polices and programs in the future for black women.

-- Jacquelyne Johnson Jackson
April, 1976

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CHAPTER ONE

INTRODUCTION

Interest in enhancing career options for black women, as well as the efficacious use of those options by black women, has accelerated over the past decade. The reasons for this acceleration are many. In general, it is safe to assume that those reasons are related to efforts to reduce the overall dependency ratio within our society. They are also related to efforts to foster racial or sexual equality within the marketplace. More specifically, those reasons are related to growing concerns about the personal and social consequences of such trends among black women as their numerical growth in or increased rates of unemployment, illegitimacy, and family headships. Included within the latter instance is their heightened representation among family heads who are not within the labor force, or who continue to preside over families living in poverty. Needless to say, such trends as these have been generated by many variables, including the widening demographic heterogeneity of black women, their increasing longevity, their decreasing proportion of married women living with their spouses, and their increasing female excessiveness within their race-specific marital pool.

Concomitant phenomena also include the decreasing value of a secondary education as a factor promoting their entry into the labor force or equipping them more adequately for adult living. As an example, a significantly larger percentage of black women who have completed high school only are likely to be officially unemployed than was true several or more decades ago. An increasing number of high school graduates of both sexes and all colors are less likely to possess basic skills in reading and mathematics than was true earlier as well. Further, the greater rapidity of social change, such as that exhibited by the growing complexity of application forms for employment and various other benefits, has been accompanied by an increased proportion of high school graduates unable to cope successfully with these types of requirements. Other concomitant phenomena include the disproportionately larger increases in the labor supply (as opposed to the labor demand), due partially to the entry into the United States labor force of an increasing number of legal and illegal aliens, as well as the reentry of previously retired senior citizens. The impacts of events arising out of these concomitant phenomena upon the employment opportunities for native citizens of the United States (and particularly for the younger ones) need to be subjected to critical examination by those concerned about career options for black women born within the United States now and in the foreseeable future.

The aforementioned interest in accelerating career options for black women has also been accompanied by a relatively widespread belief that black women have benefitted tremendously from the various Federal policies and programs of the 1960's and 1970's whose primary intents were those of fostering the equality of educational, occupational, employment, and income *results* for minorities. Unfortunately, insufficient evaluation of these Federal policies and programs occurred. Therefore, although impressionistic judgments abound, there is little substantive evidence which will permit valid and reliable evaluations of the *results* of those Federal policies and programs upon black women as a categorical group.

However, it does seem apparent that the relative socioeconomic status of black women, in comparison with the statuses of black men and white women and men, remained generally unchanged over the past decade. A logical extension of that generalization leads to the imputation that Federal efforts to improve the career options of and the use of those options by black women as a categorical group over the past decade were less effective than they might have been. That is, they were perhaps less effective than they might have been due to the complications in policies and programs which arose from conflicts in competitive ideologies and priorities. Those efforts were also hampered by fragmentation, indecisiveness, and personal and group prejudices of varying kinds. Yet, to be fair, many of those Federal effots were certainly characterized by sincere intents, and some individual successes were clearly generated.*

A number of those Federal efforts demonstrated clearly that some black women are positively motivated toward upward vertical mobility in their employment and occupational patterns. These efforts also demonstrated clearly that other black women were negatively motivated toward vertical mobility. That is, some women were sagacious in selecting and using career options. Others were not. Their differential patterns in selecting and using career options have led to many intriguing questions, such as those about the interactional effects of specific individual and situational events predicting successful outcomes in career patterns of black women. They have also aided in raising questions about the types of Federal policies and programs which are most likely to provide viable career options for black women in the future.

---

*For one such example of an individual success story of a black woman who was aided by Federal policies and programs, see Appendix A.

As an instance, Ella Kelly of the National Institute of Education (NIE) has been especially concerned about the need for a more focused Federal approach to the problems of providing improved career options for a wider range of black women in the years ahead. Her field experiences have led her to formulate some very concrete questions about black women and career options. She has wondered why some black women who could be objectively categorized as desirable participants in particular training programs readily available to them within their metropolitan environments refuse to participate in such programs even though they are aware of the programs and know that the programs could lead to better opportunities for themselves and their family members, whereas other women, similar to them in background, readily participate. She has also wondered if Federally sponsored training programs likely to lead to direct employment have a greater probability of placing black women in jobs if the training is racially segregated or integrated. Kelly has speculated about the most effective ways for spreading program awareness to potential female participants in different geographical settings. For example, what is the best mix of publication within the mass media and personal contact? Finally, she has been concerned about the role of the National Institute of Education, as a Federal agency, in helping to maximize career options for black women now and in the near future.

PURPOSE AND SCOPE

This position paper is a direct outgrowth of Kelly's concerns about the appropriate role of the National Institute of Education in the general and specific Federal problem of enhancing career options for black women over the next several decades. As such, it has three primary purposes: (1) the conceptualization of a problem related to career options for black women; (2) the provision of background information related to that problem; and (3) the provision of a set of recommendations which could be acted upon by the National Institute of Education, separately or in concert with other Federal agencies, in helping to resolve that problem. The scope of the paper is generally restricted to black women between the ages of 16 and 54 years, but data about their black and white male and white female counterparts are often drawn upon for comparative purposes.

The position paper itself, which was also limited by the fragmented and inconclusive status of relevant studies within the available literature, is based upon various types of resources. They include personal observations made over the years as a black woman actively employed within the full-time professional labor force. Statistical data, frequently in raw form, were drawn largely from the United States Department of Labor and the United States Bureau of the Census publications, primarily since 1972. Additional observations were obtained from meetings (primarily of women) which focused fully or partially upon women and work, as well as from indirect observations of programs designed to promote career options, and from observations of others whose knowledge of black women, the world of work, and bureaucracies was significantly above average.

The term career options, for which there is no universally accepted definition, is used within this paper to refer to formal educational training and on-the-job training where the major objective is that of preparing women to function adequately within their probable or actual roles as (a) workers, (b) primary individuals, (c) household or family heads, and (d) wives and mothers. This definition of the concept of career options recognizes that most women will function in varied role-sets simultaneously or over time. It also underscores the necessity for the type of training which helps women to learn to function effectively in these complementary role-sets, and, more important, it focuses upon the need for redefinition of these various roles, wherever necessary, to reduce their conflicts, thus increasing their compatibility.

This is not the traditional position paper for a number of different reasons. It does not represent the outcome of an exhaustive study of all of the theoretical and empirical data related to career options for black women in the United States. It is not based on a systematic field study of the various programs providing career options for black women within the United States. Various factors, such as financial and temporal considerations, as well as the lack of relevant data, prohibited this type of pursuit.

It is also not traditional inasmuch as it occasionally sets forth certain position statements without simultaneously setting forth alternative explanations within the realm of Sociology or Psychology. It also follows a similar tack with respect to controversial issues within the realm of American society. For example, some individuals take the position that higher priority should be given to determining the underlying motivations for women who seek entry into the labor force. Are they motivated to seek work for self-actualizing purposes? Or are they motivated to seek work for reasons of economic necessity? Presumably, then, following determinations of motivations for seeking work, greater efforts would be made to employ women who seek to work out of economic necessity than out of self-actualizing factors. This author, however, takes the position that greater priority should be placed upon the provision of jobs for women who have not yet reached the traditional retirement age in the United States who wish to work, whether their primary motivation is for economic necessity, self-actualization, or an admixture of both. Further, the tendency to concentrate upon the movitations enducing women under retirement age to seek gainful employment within the labor force is itself sexist.

Or, as another example, some persons are quite convinced that a reasonable explanation for shortfalls in the higher development of educational and occupational careers for black women is linked to early childbearing patterns. It is often assumed under this viewpoint that schooling benefits should be made more persuasive to young black women so that they will postpone childbearing until they have received better preparation for adulthood. However, this author takes the position that the evidence for early childbearing as the causal variable in restricting significantly educational and occupational careers among black women is yet flimsy. In fact, early childbearing may more nearly be viewed as an intervening variable which has been made to appear as if it were the causal variable in the chain of events of educational and occupational career progression. Few, of course, have examined the extent to which late childbearing among professionally employed women, as an example, has negative consequences upon their career progressions.

Finally, this is also not the traditional position paper in that the author admits at the outset the influence of objective and subjective factors affecting the selection of the problem, the background information, and the recommendations. Some of the issues which are raised within this position paper, such as that about conflicting minorities, are issues which too many persons have attempted to ignore, as if merely ignoring them will make them disappear. However, in the next several decades, many employers, including the Federal Government, will have to come to grips with issues already emerging from affirmative action policies. Consider, for example, the case of two female applicants for a single job opening who are similar by age, race, health, number and age of children, personality characteristics, and educational and occupational training and experiences, and who are dissimilar in that the husband of one earns approximately $25,000 more annually than the other. Which should be employed and why? Or, to make it easier, consider the case now where a disproportionately larger number of the wives of professors at the predominantly white universities have been recruited for doctoral training than has been true of equally qualified women without such husbands!

In any case, the overriding conclusion of this position paper about career options for black women is the need for a national policy which, with adequate implementation and enforcement, will lead to a plummeting of the present trends of little relative change in their occupational, employment, and income patterns in comparison with their non-black and non-female counterparts. The specific recommendations set forth for the National Institute of Education focus largely upon roles involving research and evaluation necessary for developing, monitoring, and modifying policies related to career options for black women.

CHAPTER TWO

CONCEPTUALIZATION OF THE PROBLEM

This chapter is concerned with the first primary purpose of this work: the conceptualization of the problem related to the career options of black women, with emphasis upon a problem which can be appropriately reduced by actions of the National Institute of Education. This conceptualization is approached in two different, but related ways. First of all, the overall conceptualization of the problem guiding this work is set forth. Then, concentration is placed upon specific issues or concerns which surround that problem. In some instances, those issues or concerns are set forth in a relatively objective manner, in other instances, in a subjective manner, reflecting, no doubt, the author's sharing of certain ambivalences about the definitions of issues and their resolutions with the members of the contemporary American society.

THE PROBLEM

While racial and sexual discrimination have obviously affected the career options of black women, and will continue to do so within the foreseeable future, it is insufficient to take any simplistic viewpoint of black women by merely emphasizing anew the obvious effects of race and sex. It is also insufficient to continue to point out the differential impacts of such variables as socioeconomic status (e.g., mother's educational level) or peer group influence (e.g., tendencies of college students to select institutions attended by their friends). What is eventually needed, assuming the further development of theoretical and methodological prerequisites, is a highly sophisticated analysis of the sum total of causal factors affecting specific black female subsets in particular ways. Thus, the overriding problem is one of setting long-range basic and evaluative research goals to help in unraveling the mass of causal variables determining the selection, use, and benefits of various career options for black female subsets. Presently, the National Institute of Education could contribute toward the reaching of that long-range goal by encouraging research in that direction.

The specific problem conceptualized for this position paper was that of deriving inferences from statistical data which permitted some determination of the probable effects of recent Federal polices and programs upon the career options of black women, and, along with other relevant data, to develop a set of recommendations which, when acted upon, would be helpful in furthering our knowledge and understanding of the types of policies and programs which best aid black women in utilizing and improving their career options. In addition, a secondary problem was that of looking at some issues which are intertwined with current efforts to aid black women.

SOME BIASES, SOME ISSUES

The very complexity of the emergent issues which affect present and future career options of black women makes it difficult to isolate a limited number of those issues. Yet, three important issues shall be singled out.

They are those of (1) competent education, (2) traditional female roles, and (3) conflicting minorities. They constitute the most overwhelming issues presently or allegedly affecting career options for black women today. Surrounded by conflict and contradiction, the satisfactory resolution of each of these three issues requires substantive social changes which will be simultaneously advantageous and disadvantageous for different social groups.

Competent education. Efforts toward public school desegregation over the past twenty years were highly effective in divergent directions. Most important, those efforts aided in revealing the fallacies of "separate, but equal," as set forth in the 1896 Plessy v. Ferguson decision. They showed clearly the overall discrepancies in the quality of education available for those who were black and non-black under dual educational systems. They also prompted some emphasis upon compensatory education. The thrust toward compensatory education to facilitiate smooth desegregation is interesting, inasmuch as one should be able to presume that educational desegregation and compensatory events are different events. Yet, the passage of such acts as the Emergency School Aid Program and the Emergency School Aid Act, both of which place a disproportionately higher emphasis upon compensatory than desegregatory education, suggest that competent education for blacks assumed greater significance only when it was felt that the lack of competent education for them could adversely affect the education of non-blacks.

In addition, the resulting confusion of desegregatory education and quality education increased dissension between various civil rights leaders and organizations, and, indeed, as in the case of the Atlanta chapter and the national office of the National Association for the Advancement of Colored People, increased intra-group dissension. The problems were many, but one significant one was the conflict over admissions or suppressions of the actual quality of the education received by blacks. Many straw men were set up, such as the inability of black children to learn from non-black teachers, or, concomitant with that straw man, the need for effective black models within the educational environment for black students.

Further, the problem became complicated by the Federal stress upon narrowing racial gaps in educational achievement, as measured only by the quantity (and not the quality) of completed formal education. The other intertwining issues were many, including that of the supposition of culturally biased tests, disfavorably slanted toward blacks. But the compelling issue was that of the possibility of racial differences in innate intelligence, as raised by Jensen (1969) and the raging controversies which followed. Jencks' (1972) sobering examination of relationships between education, occupation, and income was also important. None of the complementary or contradictory issues contained within such works as those have yet received any sufficient discussion or exploration as they relate specifically to their implications for career options for black women.

Published debates upon these issues, however, are too well-known to reiterate here, with one exception. This author believes that the nature-nurture issue related to racial differences in intelligence, et cetera, cannot be examined empirically until such a time as the society itself becomes free of racial prejudices and discrimination. Very often, sociologists and other researchers provided purported racial comparisons where the variable of socioeconomic status has been held constant. Therefore, for example, they determine that even when socioeconomic status is held constant, the black mean intelligence score is lower than that of white. The inherent difficulty is that socioeconomic status within the United States is a decided function of not just education, income, and occupation, but also that of race. Consequently, if race is a determinant of socioeconomic status, then comparisons between different racial groups cannot be made when socioeconomic status is held constant, inasmuch as socioeconomic status cannot be held constant if racial variations exist. This does not mean, however, that racial comparisons are entirely inappropriate for other purposes. For example, racial comparisons are particularly useful in measuring racial discrimination if one makes the necessary assumption that the distribution of demographic variables, such as those of education and income, would show little variance in native-born populations of various colors and of long duration within a national boundary.

A considerable amount of energy has also been wasted upon the issue of the presumed educational superiority of black women over black men, without a full realization of the "nothingness" of those comparisons. In truth, and with specific reference to the utility-value of education for labor force participation, black female educational training has been and remains inferior to that of black males, for any number of different reasons /see, e.g., Jackson (1973) for a fuller explanation/.

But the emphasis is only displaced when those types of issues are permitted to obscure the real issue of the quality of education received by black women during their formative years within the educational system. Therefore, it becomes necessary to ask critically about the value of elementary and secondary education for black females, and to seek to find educational models which are more appropriate fits for the necessary or desired educational outcomes. It also becomes necessary, then, to examine carefully the failures of the current educational systems, which may well require such extreme measures as correlating educational achievement scores of black female students with the intelligence quotients of their teachers, _et cetera_. In short, adequate educational revamping of the curricula and of the trainers is needed. Quality education must be developed on the basis of the needs of the specific individuals and of the society in which they are apt to live out their lives as adults.

Therefore, this author would concur with the types of analyses made, among others, by Dale Parnell, formerly State Superintendent of Education for Oregon, and currently Chancellor, San Diego (California) Unified Community College System. Parnell believes that educational accountability within elementary and secondary education is an achievable goal which must, in part, be based upon the awarding of secondary certificates only if students have passed well-constructed and relevant competency-based examinations. Pragmatic aspects of the educational training would help to ensure comprehensive determination of "Education for what?" Individuals completing a high school education would then be in possession of the basic reading, writing, and arithmetical skills, or would be functional literates. They would be familiar with the types of skills necessary to function effectively within this society, such as those skills which are needed to apply for and maintain employment. They would have some understanding of the basic citizenship skills. They would certainly have had an exposure to occupational counseling and guidance sufficient to permit them to exercise wise choices in developing their careers, and in understanding the "career-locking" process which typically occurs at each stage of development.

Hence, the issue of competent education should not be confused with the intertwining issues related to educational desegregation. Competent education must be examined carefully in terms of the basic requirements for all individuals within the school-age population, including those of young black females. It must be developed in terms of accountability being a special responsibility of the educational system, and with a shift from current Federal sup;ort for education being primarily a function of direct contact with a multitude of local educational agencies, toward that of either Federal block grants for education to the States, or the development of a Federal system of elementary and secondary education.

A viable system of competent education may also require hard-nose choices between types of programs and specific age-groupings who will receive greater concentrations of attention and monies. For example, evaluations of Project Head Start may well reveal that the discontinuation of that project is feasible if it leads toward the development of public educational systems opened to all children within their early years of childhood development. Or, conversely, it could be that such evaluations may show that the continuation of Head Start is most feasible if it confined its students to persons between early infancy and three years of age. In any case, some determination of the areas in which such programs as Head Start could be most effective in enhancing the educational development of students should include an evaluation of the methods which are most effective in working with parents to aid them in socializing their female children for traditional and non-traditional educational and occupational roles.

Competent education for black women, then, should be education which is utilitarian in nature and scope, and which will be effective in meeting their needs, and thorough in providing the training required for further occupational development. Such education should not engage in subterfuges, such as that of training secretaries by omitting necessary training in Standard English, either as a first or second language. It should not emphasize training for robots or surplus persons. It should emphasize cognitive and affective training helpful in moving individuals through life as adult citizens on an independent and interdependent, but not a dependent, basis.

Traditional female roles. A difficulty with traditional discussions of traditional female roles is the typical failure of discussant participants to recognize the constant existence of deviations from group centralities, deviations which have even been constant among white women over time within the United States. Those who fail to recognize these constant deviations commit the fallacy of mistaking recent changes as changes of kind, and not of degree. For example, the traditional female role, both for blacks and whites, throughout this century has not been that of a non-working individual. It has been that of a working individual. Some individuals worked within the labor force, others only within the house force as domestic engineers, and some within both the labor and the house forces.

Many persons, of course, forget that the major advances in household technology are quite recent, perhaps because they wish to suppress memories of wasy-day and boiling black iron pots, or ironing-day and heating irons on wood and coal stoves, or quilting day, *und so weiter*. Also often suppressed are recollections of food-raising and food-processing occurring within the home. It is indeed difficult for many of us to remember that the United States was a predominantly rural society, where "a man's work was from sun-up to sun-down, but a woman's work was never done," only a few short decades ago.

There has also been non traditional female role per se within the American normative structure. There have been, however, specific traditional female roles related more nearly to class membership within various systems of social stratification. The overlapping similarity within the prescribed norms for women as wives and mothers within the respective upper classes of the black and white stratificational system was and remains generally much greater than that between those for women within the upper and remaining classes in each of the respective stratificational systems. Even within particular social classes, some disparity existed in terms of female expections or expectations for females. There has been an increase in the number and percentage of families within the black and white middle classes who socialized their daughters to pursue top-level professional occupations, for example, which represents a difference of degree and not of kind.

There have also been shifts over time in normative prescrptions about traditional female and male occupational roles. For example, in the latter part of the previous century, the majority of black school teachers were and were expected to be males. Later normative and behavioral shifts helped redefine the role of elementary school teacher as "woman's work." But more recent shifts, correlated both with the military draft exemptions provided for male elementary school teachers during the Viet Nam War and the continuing need to expand job opportunities for males, have tended to delete sex linkages with that role.

Any examination of traditional female roles within the world of work for black women must be based upon analyses on the individual, group, and societsl level within the labor, the house, and the labor/house forces. Generally, throughout at least this century in rural areas, black women were expected to work as a part of their familial constellation within the "family's job." As an instance, sharecropping families (and not sharecropping individuals) were hired. While the family head was responsible for fulfilling the sharecropping contractual obligations, the entire familial constellation, regardless of its specific composition, was expected to assist in the task. Thus, the pattern of family occupation as opposed to individual occupation was the typical modus operandus. Also within these rural societies, where much of the family support was generated through a quasi-self contained economic family unit, both women and men worked at home, with some sexual division of labor, as in the case of men being expected to butcher hogs and cattle, and women more nearly to kill chickens.

Many rural black families experienced bimodal occupational patterns in that the males retained their occupational roles on their farms and also obtained paid employment off their farms, sometones on the farms of others, sometimes in nearby factories, and in various other industrial settings. The women within those families often experienced bimodal occupational patterns as well, except that their second occupation most frequently involved paid employment conducted within their homes. For example, many such women "took in washing and ironing."

The major norm of overall family support as a responsibility shared by women and men continued within urban settings, but with some modifications, most of which have already been well described for blacks in the works of Du Bois (1899) and Frazier (1939). Most often, within husband-wife families, the sexual division of labor relegated the responsibility of earning monies to the husband, and the inside housekeeping chores to the wife. For any number of reasons, one of which must be the generally harsh labor force conditions then existant for black women, men preferred to keep their wives without the paid labor force, and women preferred to remain without that labor force. However, behavioral norms were often inconsistent with ideal norms, with the presence of a wife within the labor force usually being inversely related to social class. Yet, although many black women within the labor force worked because they needed the monies for themselves and their families, many other women worked not because they needed the money, but for self-actualizing purposes.

Among blacks, traditional female roles within the occupational world were often relegated on the basis of such variables as inferior economic, power, and social prestige; isolated social contact; and close proximity between the home and job. Thus, in comparison with their male counterparts, many women within the traditional female roles worked longer hours and earned fewer wages and fringe benefits. Many worked in isolation, inasmuch as they constituted the only on-site employee of a given employer, as in the case of a number of domestics. Their average number of co-workers was smaller. The distance they traversed between home and work and work and home was generally less, and less interesting.

Within work settings where administrative responsibility was delegated to or held by blacks, as in the case of black colleges, the norm of traditionally inferior female roles remained.

On the larger societal level (i.e., the United States), the patterns of sex discrimination, reinforced by racial discrimination, remained, continuing the support at all levels for inferior rewards to black female labor force participants. This same pattern remains in effect today.

The issue, then, of traditional female roles is the crucial one of deliberate misinterpretation or falsification of the roles which have been customary for black females by those who seek to limit the growth of a competitive labor pool. That is, a number of persons argue forcibly that black women have been better off than white women based upon results of sex comparisons within each group. The obvious penalties imposed upon black women by such comparisons are probably intended. The twisted logic permits distorted perceptions of black women as being "better off" than white women within the labor force (and particularly within the professions), since the occupational and income gaps between black women and men are narrower than those between white men and women. Lerner (1972, 1973) exemplifies this twisted logic in her work about black women.

In another context, Jackson (1975: 78-79) commented thusly upon the twisted Lernerian logic:

> Essentially, Lerner misled herself not only by accepting uncritically the usual myths about educational and economic positions of black females compared with black males, but, most important, by juxtaposing black and white female comparisons in assessing black females and males. That is, she was overconcerned about showing that within their own racial groups, black females enjoyed higher statuses than white females. Even here, however, she failed to provide convincing data. For example, her comparative data about the proportion of females among blacks and the proportion of females among whites who were physicians and attorneys did not show the proportion holding medical or law degrees. They showed only the proportions within the labor force. Since black women with professional degrees are far more likely than comparable whites to be gainfully employed, such data are highly circumspect in showing what Lerner would have us believe (namely that "black women are somewhat better represented than white," 1973:19). The data would not be circumspect if appropriate controls for differential sex ratios within the black and white adult populations, buttressed by extrapolations based upon equal proportions of black and white women with degrees in the labor market, had been established. But even Lerner pointed to the significantly higher representation of white than black women in the professional market.
>
> In short, her artificial dissection of black women was grossly misleading. Once again, their educational and economic opportunities are affected by race and sex, and not be race or sex. Presently, the United States contains only one control group for measuring racial and sexual discrimination: white males. Black female and white male educational and economic gaps reveal racial and sexual discrimination, while black and white male gaps reveal racial discrimination only, and white female and male gaps reveal sexual discrimination only.
>
> Lerner...overlooked such points as those stressed immediately above by following too readily the usual sexist route in showing that black females have been subjected to less oppression than black males. This sexist conclusion, replete in most social scientific and behavioral literature, was generally reached by black and white males committed to male superiority.

> Black males appeared to be more oppressed only because they were not compared with an oppressed group (i.e., oppressed black males were compared with the nonoppressed group of white males), whereas black females were compared with an oppressed group (i.e., oppressed black females with oppressed white females or oppressed black males). Black females can be regarded only categorically as less oppressed than black males by acceptance of the superiority of male over female sex role expectations, and especially so in the areas of education, occupation, employment, income and family headship. A few, of course, have long recognized that black female oppression, if not worse than that of black males, was at least equal to that of black males, with such recognition not being dependent upon their valuations of sex roles.

Moynihan (1965), who correctly called our attention to the increasing economic and related problems confronting black low-income families with female heads, is also guilty of overlooking the traditional female role as one which included working. Thus, his solution for halting further the deterioration he perceived within those black families was that of upgrading black male unemployment and underemployment. Moynihan's (1965) concentration upon improved employment conditions for males does raise an issue pertinent to the present position paper. For example, should Moynihan have concentrated upon improved employment conditions for all blacks, regardless of sex, who were or who were likely to become household or family heads? If such an approach were followed by the Federal government, what would be the consequences upon black marital patterns? Sometimes one policy with obvious advantages for one given problem can have unintended and unwanted consequences elsewhere.

How, then, can we conceptualize the issues surrounding the traditional female roles? Perhaps the most important conceptualization is one which considers the decreasing division of labor within the labor force by sex, and the increasing numerical competition for available positions, where, as was noted earlier, the demand for participation within the employed labor force has now outstripped the supply. This does not mean, of course, that additional jobs could not be generated, which would balance out more evenly the labor demand and supply. When so viewed, it becomes apparent that efforts which distort the real participation of black women as workers over time, and their increasing need for work as paid members of the labor/house forces are attempts to reduce the competitive stance of black women within the world of work. From this perspective, black women now have a head start as "surplus workers."

What is needed is a careful analysis of the various female occupational roles traditional among different black female subgroups, so as to isolate the determinants of desire for labor force participation, choice of career, and career success. This is not, one hastens to add, in contradistinction to an earlier position that women's entry into the labor force should not be dependent on their motivations for seeking work. In any case, the suggested analysis should not be limited to college students, nor to college-educated women. For example, among blacks, it has been traditional for the wives of military officers to remain without the labor force. Is a similar pattern present among their daughters, with one relevant variable being the specific occupation of the husbands of the daughters? Are black females with high school education only more influenced in occupational selections by the occupations of their mothers than is the case with black females without high school education? Are career choice and career maintenance following marriage more nearly related to situational factors without the home, or more nearly related to situational factors (including husbands' attitudes) within the home? In short, and in addition to the other types of issues surrounding traditional female roles, a major issue is the lack of adequate data, a point reiterated here for emphasis. The basic questions in this respect, then, include:

1. What are the appropriate black female subgroupings for studying their traditional female roles, with emphasis upon occupational roles?

2. What are the dominant roles and the deviant roles within such groupings?

3. What, if any, are the commonalities in traditional female roles between the subgroupings?

4. What, if any, are the differenes in traditional female roles between the subgroupings?

5. What are the factors which support continuance of the traditional female roles within each subgroup?

6. What are the factors which lead to deviation from those roles within each subgroup?

7. What are the congruences and incongruences on an individual, group, and societal level between the ideal and real norms for traditional and non-traditional female roles within and between the subgroupings?

8. How can the results of such an inquiry be used in improving the career options for various subgroups of black women in the future?

Conflicting minorities. Of the three issues specifically singled out for discussion here, this issue is the one which is most fraught with controversy, contradiction, and hostility. It raises important questions about the priorities which disadvantaged groups should receive in policies and programs designed to reduce the inequities which they have experienced as victims of prejudice and discrimination.

For example, the Federal Government's move toward setting quotas for minority admissions to institutions of higher education receiving federal funds in the late 1960's was an effort to compensate for the historical discrimination against blacks in most such institutions, and particularly so in the graduate and professional programs. However, some Jewish groups viewed with alarm the establishment of quotas in higher education, since they feared that such a move would be detrimental to them (see, e.g.,
Therefore, those Jewish groups launched various efforts to thwart the quota system, and were generally successful in moving the Federal Government's position away from "quotas" to "goals." In addition, the DeFunis case made a direct challenge against favoritism toward blacks in admission standards at

the University of Washington, but the United States Supreme Court to date has avoided a direct decision on the heart of the issue.

Various minority groups have been in conflict about the distribution of rewards and privileges in the quest for education and employment. As indicated earlier, some blacks have been especially concerned about the practices at some universities which have resulted in a disproportionately larger percentage of the wives of white faculty entering the universities as graduate or professional students and being counted as a part of the minority quota. They have also been concerned about the continuing discriminatory practices which curtail the number of blacks entering the Federally-supported predoctoral and postdoctoral programs, inasmuch as the universities often report to the Federal Government that the dearth of minorities, including blacks, in such programs is a direct result of the dearth of qualified or interested blacks, as opposed to their own lack of efforts in recruiting blacks. Consequently, an increasing number of such programs contain far more white women than would have been the case had sufficient recruitment of blacks or other nonwhite minorities occurred. In addition, some Federal Government agencies are apparently being asked by non-Japanese Asian American minorities to remember that not all Asian Americans are Japanese, as in the case of some recent complaints which have been received by the National Institutes of Health.

For any number of different reasons, the types of problems alluded to above stand in need of resolution. In the specific case of blacks, this author takes the position that the resources of the United States may well be sufficient (or could be made so) to reduce the various inequities against specific minority groups, including white women, in the areas of education and employment. However, since sufficient resources are either not yet available or are not being made available, then it is necessary to distribute these rewards and privileges on the basis of some meaningful system. Thus, there is a definite need for the establishment of minimum quotas in hirings and admissions for all institutions and businesses which qualify as federal contractors. The quotas should be set forth for specific race-sex groups. Only under such conditions will one see any substantive change in the educational and employment levels of black women throughout the remaining years of this century.

In other words, bearing in mind the growing excesses in the labor supply, as well as the decreasing proportions of black female family heads under 65 years of age within the labor force, and the increasing proportions of such families within the poverty sector of the nation, it becomes necessary to raise the important policy question of further determinations about priorities for entering the employed labor force. It is not sufficient to recognize that the Federal Government has established some priorities for household heads or for female household heads for employment positions available through Federal contractors. It is important to recognize that the establishment of such priorities is generally ineffective if the individuals designated to receive preferential treatment lack sufficient skills to warrant their employment. In fact, a number of preferential regulations have already backfired in practice. In some instances, the apparent position taken by the Federal Government has been that the employers--the Federal contractors--must also assume the responsibility of training the individuals for the positions since their lack of skills cannot operate as a barrier to receipt of the position. Yet, the same Government has thus far avoided any serious attempt to evaluate unequivocally the status of the educational quality being received by the younger counterparts of the designated preferential employees. It has pushed the burden of correcting the educational deficits upon agencies who often "must make ends meet," who do not have the power to operate upon budget deficits or to raise taxes to meet money shortfalls. Consequently, and without purposive design, the Federal Government has aided in increasing hostility and resentment against black women seeking to enter the labor force above the levels of private household and service workers.

The Federal Government, although it could not but help be aware of the myths circulating throughout the country about the preferential position of being "black and female," has failed to counter the generally false myth by providing or, more nearly, by publicizing broadly the truth. As an example, it is impossible to obtain specific data about the number of black females who receive degrees in higher education each year and the institutions which award them those degrees, inasmuch as the published materials from the United

States Department of Health, Education and Welfare continue yearly to provide information about females (which include black females) or about blacks (which include black females), but not about black females. On one occasion, several years ago, this author sought such data, and, not being able to find it elsewhere in any published government document, called the appropriate office within the Federal agency. The response, in effect, was that the presentation of specific data about black females would require additional space on the pages. The informant, when asked if she could be quoted, indicated immediately "Oh, heavingly days, no!" This is related to the issue of conflicting minorities in many different ways, with the most important one being the lack of available data which would help to resolve some of the raging controversies between minorities. In this specific case, again, too many individuals believe that black females have been most advantaged by recent acts of favoritism, but where are the data?

It is also interesting that the myths continue to circulate about the preferential treatment accorded black females in faculty recruitment efforts by the nation's colleges and universities. Unfortunately, concrete data helpful in resolving this issue have also not been publicized by the Federal Government. Yet, generally insignificant percentage gains occurred in black female representation among the faculty in senior colleges and universities throughout the nation. The female gain which did occur was probably greatest for white females. Some will explain the latter probability by resorting to the greater likelihood of white females holding the terminal degrees, and therefore possessing the minimum qualifications necessary for holding a professorship. But others will note that opportunities also arose for women to obtain terminal degrees--opportunities more magnanimous than ever before--and that the opportunities were more frequently granted to white than to black women.

Also necessary to mention at this juncture is the frequently inappropriate assistance provided by some blacks who sought to act as employment brokers for a number of federal contractors attempting to meet requirements as equal opportunity employers over the past decade. Within the academic world, for example, some few blacks took great pride in developing lists containing names and addresses of colleagues known to them who held terminal degrees. Unfortunately, they failed to recognize their involvement in "black musical chairs," a game which generated some shift in the location of a few black professionals, but which did nothing to bring about needed changes in the system of recruiting blacks by the institutions involved. On many occasions, the institutions would simply write to individuals on the list, having learned from their recruiting colleagues that those individuals were unlikely to move, but the file based upon presumed effort in reaching the goal (and not the quota) continued. In some specific instances, some institutions even resorted to the use of "dummy musical chairs." That is a game in which the rules call for the particular department or agency to have a secretary type a letter of regret to an individual who has not even applied for a position, to place the original letter in the office paper shredder, and to file the xeroxed copy within the office files. Under normal conditions (and perhaps with secretaries not employed under equal opportunity conditions), the black who has not applied and who does not know he has applied will not know that his non-application was rejected (generally on the basis of insufficient qualifications), nor will he know that he is among that number to be counted by the Office of Civil Rights if it chooses to confirm equal rights compliance.

But, under a few extreme conditions, secretaries have inadvertently mailed the letter, and then the individual becomes surprised to learn of the manipulation which occurred without his knowledge. "Dummy musical chairs" is probably relatively widespread, although insufficient empirical evidence presently exists to document the extent to which it has occurred. In some instances familiar to this author, the apparent position taken by the Office of Civil Rights which blacks have complained about "dummy musical chairs" is that the individual must bring a complaint through the Regional Office, as opposed to the Office of Civil Rights itself launching an investigation, or taking greater pains in verifying the extent of recruitment efforts which really occurred. One solution could well be that of the Office of Civil Rights requiring institutions to have greater documentation of proof which the Office of Civil Rights, in turn, would spot check.

Much of the above concentrated upon conflicting minorities, or the types of conflicts which have arisen in situations which individuals have chosen to ignore or not to carry further in a quest for equality of rights. But, clearly documented, as previously indicated, are those types of efforts which have led to the DeFunis case, as well as similar cases seeking to halt preferential hiring of minorities, or of their admission to higher education, especially in professional programs.

Within each minority, including the minority group of black women, conflict surrounding desired educational and occupational goals has also been present. It has been exacerbated by the practice of holding minority group conferences involving various groups of minority women differing widely not only in their racial and ethnic statuses, but also in other demographic and socioeconomic characteristics. Hence, such groups have produced little in the way of cogent policy formation designed to promote real career options for black women in the present and the future. A part of the conflict within such meetings is due to certain Federal actions, chiefly on the part of bureaucrats setting forth the conditions under which Federal grants will be given to help support such meetings. That is, some groups seeking Federal support for conferences have been informed that the funds would be made available to them if the range of participants is extended to include more than one minority group. In these types of situations, it would be well to evaluate the success which such groups have in reaching their objectives when the groups are relatively homogeneous or relatively heterogeneous, The factors of the types of objectives, the number of days allocated for the conferences, et cetera, must also be weighed in any such evaluations. The

National Institute of Education could well aid in providing guidelines about the optimum conditions for mixing different minority groups in specific types of conferences, and particularly so for those focused upon extending educational and employment opportunities for minorities. This is similar, of course, to Kelly's concern about greater specification of the conditions under which black women benefit more from segregated or integrated employment training.

Additional conflicts which have taken place focus upon which minorities are selected to aid other minorities. These conflicts occur within and between minority groups. An example of an intra-group minority conflict can be seen in instances where many black parents recognized the apparent contradictions in employing poorly trained aides to teachers to assist black children in acquiring langauge and mathematical skills. They also recognized the hostility generated when they complained publically about those inherent contradictions. But few such parents were sufficiently courageous to question the viability of both the career options for those women functioning as aides and the training to which their offspring were exposed. Over the past few years, however, there has been some shift to the extent that more black parents are stressing the need for qualified and experienced teachers for their offspring. The lesson to be learned for career options for black women is that opportunities for occupational training must be provided, but they must not conflict with the needs of the students or clients.

EMERGENT PRINCIPLES

When one considers the specific case of the need for greater career options for black women, as well as the conditions under which such opportunities are likely to be generated and used effectively, it becomes necessary to adopt some guiding principles, or to adhere to guiding principles already apparent within the Federal philosophies. The two most important principles already apparent and which are particularly appropriate for the further development of career options for black women are those of (1) positive discrimination, and (2) equity. That is, efforts should be made to increase favoritism for black women in the areas of postsecondary education and employment until conditions of equity have been reached in the educational and employment spheres. The determination of equity, however, cannot be based solely upon numerical or percentage bases, but must be based upon feasible indices measuring the presence or absence of discrimination.

Consequently, the types of tasks which the National Institute of Education could consider are those which lead toward the development of valid and reliable instruments for measuring discrimintion in postsecondary education.

CHAPTER THREE

MYTHS AND REALITIES ABOUT OCCUPATIONAL AND FAMILIAL STATUSES OF BLACK WOMEN

Although considerable internal movement occurred within the categorical group of black women over the past decade, relatively little progress took place in the direction of relative improvements in the employment opportunities, conditions, and rewards for black women as an aggregated group. In comparison with the groups of black men and white men and women, the black female economic status continued generally as the least enviable (see, e.g., Jackson, 1973). Within the group of black women, however, further differentiation was quite evident, as were various changes in generalizations of specific subsets of comparative black female and non-black female groups.

This chapter concentrates largely upon the occupational mobility of black women who were within the labor force in the years 1965 and 1970, and changing employment and familial patterns of black women since 1970. It also considers some of the recent revisions which may be warranted in prevailing myths about the presumed employment conditions of black women. Primary emphasis is placed upon generalizations directly or indirectly related to the development of viable career options.

At the outset, it should be emphasized that the reader will be provided frequently with data about black and white women and men. This does not mean that one should shift the comparative groupings to use the particular group at a given point in time which best makes a case for black women. As previously indicated, the only true comparative group for determining the degree of "double discrimination" affecting black women is that of white males. However, it is useful to examine data for black men and white women in order to draw inferences about the differential impacts of various Federal policies and programs in education and employment over the past few years upon specific race-sex groupings. Consequently, from time to time within this chapter, data will be presented for a "double majority" (white males), a "double minority" (black females), and two "single minorities" (black males and white females).

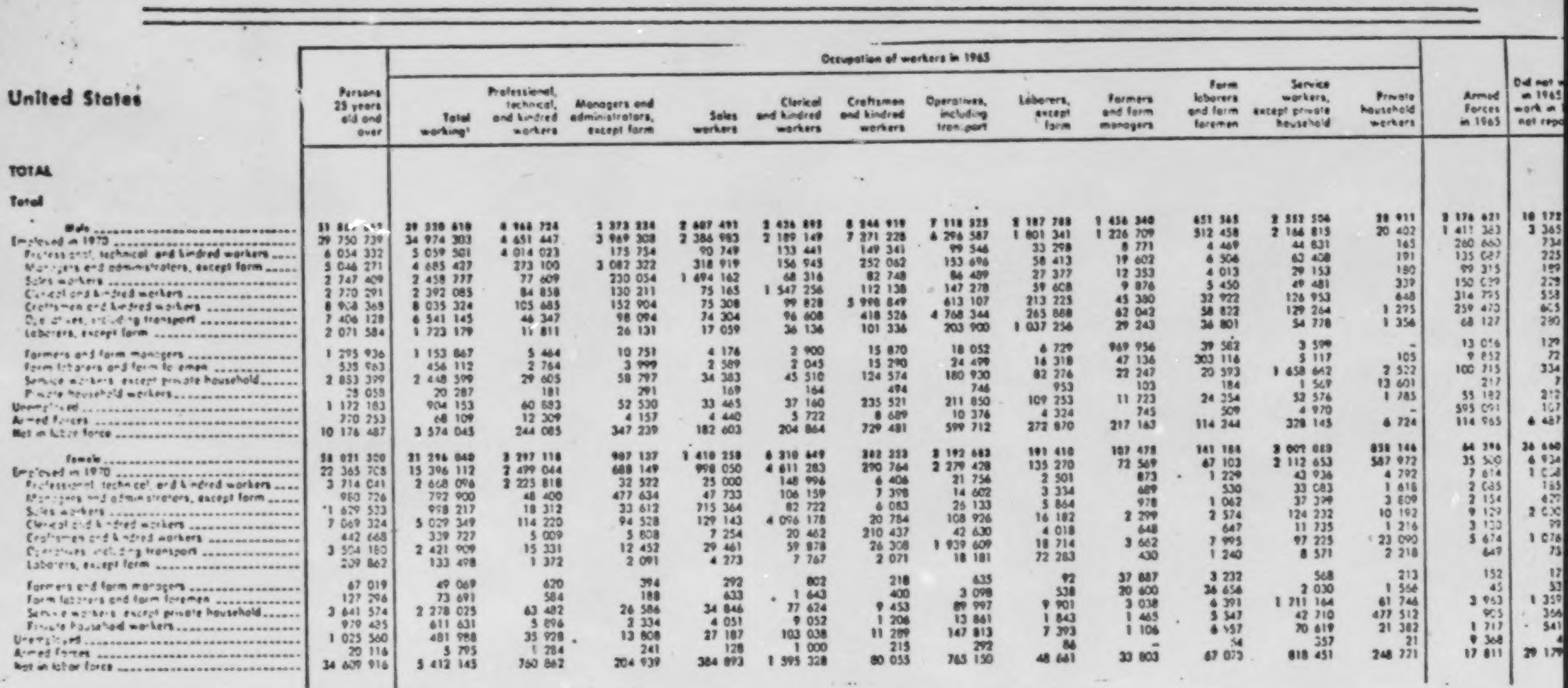
Further, one could also argue that comparisons about educational, occupational and related changes should be restricted to individuals between the ages of 18 and 35 years, in that the more recent and more dramatic changes have affected younger, and not older individuals. On occasion, in the data which follow, age breakouts are provided. However, one should not make the mistake of assuming that cross-sectional data comparisons contain sufficient evidence to draw conclusions about the probable reduction in educational and economic discrimination in the future. That is, the narrowing of the educational gaps by race within the younger generation, such as those between the ages of 18 and 35 years, does not necessarily mean that narrowed occupational, employment, and income gaps by race will persist for the younger generation as it ages. It is true, however, that the pooling of data for all adults could well obscure the need for differential policies and programs related to the quality of life, occupational opportunities, research and demonstration projects, *et cetera*, which might be developed by the National Institute of Education or other Federal agencies.

The final caveat is that most of the data presented in this chapter were taken from publications of the United States Bureau of the Census. The data, therefore, have sampling errors. However, the general procedure followed herein is that of reporting the data without giving the sampling errors, and without computing the statistical differences between various percentages, means, or medians. This is, of course, a customary way in which data have been handled, but some readers may well wish to establish a criterion of reliability and compute the statistical significance of the differences between the various race-sex groups. In any case, the reader should be cautioned that the discussion is based largely upon absolute differences in data over time or between groups.

OCCUPATIONAL MOBILITY, 1965-1970

Tables 1 and 2 (pages 41-42) contain data about occupational mobility between 1965 and 1970 for the total male and female populations, and for the total black female and male populations in the United States in 1970. An examination of data specifically about black women, 25 or more years of age, who were in the employed civilian labor force in 1965, and for whom specific occupations were reported, showed that 31.3 percent of them were within the white-, and the remaining 68.7 percent were within the blue-collar sector. The white-

Table 1. Occupational Mobility Between 1965 and 1970 By Sex for the United States Population: 1970



United States	Persons 25 years old and over	Occupation of workers in 1965												Armed Forces in 1965	Did not w in 1965 work in not repo
		Total working¹	Professional, technical, and kindred workers	Managers and administrators, except farm	Sales workers	Clerical and kindred workers	Craftsmen and kindred workers	Operatives, including transport	Laborers, except farm	Farmers and farm managers	Farm laborers and farm foremen	Service workers, except private household	Private household workers		
TOTAL															
Total															
Male	[illegible]	39 330 610	4 966 724	3 373 334	2 607 491	2 426 893	8 244 919	7 118 325	2 187 788	1 456 340	651 365	2 552 506	28 911	3 176 621	10 172
Employed in 1970	39 750 739	34 974 303	4 651 447	3 969 308	2 386 983	2 189 149	7 271 228	6 296 587	1 801 341	1 226 709	512 458	2 166 815	20 402	1 411 383	3 365
Professional, technical, and kindred workers	6 054 332	5 059 501	4 014 023	175 754	90 749	133 441	149 341	99 546	33 298	8 771	4 469	44 831	165	260 660	734
Managers and administrators, except farm	5 046 271	4 685 427	273 100	3 082 322	318 919	156 945	252 062	153 696	58 413	19 602	6 506	63 408	191	135 027	225
Sales workers	2 747 409	2 458 777	77 609	230 054	1 694 162	68 316	82 748	86 489	27 377	12 353	4 013	29 153	180	99 315	189
Clerical and kindred workers	2 770 291	2 392 085	84 858	130 211	75 165	1 547 256	112 138	147 278	59 608	9 876	5 450	49 481	339	150 029	279
Craftsmen and kindred workers	8 908 368	8 035 324	105 685	152 904	75 308	99 828	5 998 849	613 107	213 225	45 380	32 922	126 953	648	314 795	558
Operatives, including transport	7 406 128	6 541 145	46 347	98 094	74 304	96 608	418 526	4 768 344	265 888	62 042	58 822	129 264	1 275	259 470	665
Laborers, except farm	2 071 584	1 723 179	11 811	26 131	17 059	36 136	101 336	203 900	1 037 256	29 243	36 801	54 778	1 356	68 127	290
Farmers and farm managers	1 295 936	1 153 867	5 464	10 751	4 176	2 900	15 870	18 052	6 729	969 956	39 582	3 599	-	13 016	129
Farm laborers and farm foremen	535 963	456 112	2 764	3 999	2 589	2 043	15 290	24 499	16 318	47 136	303 116	5 117	105	9 852	72
Service workers, except private household	2 853 399	2 448 599	29 605	58 797	34 383	45 510	124 574	180 930	82 276	22 247	20 593	1 658 662	2 522	100 715	334
Private household workers	25 058	20 287	181	291	169	164	494	746	953	103	184	1 569	13 601	217	7
Unemployed	1 172 183	904 153	60 693	52 530	33 465	37 160	235 521	211 850	109 253	11 723	24 354	52 576	1 785	55 192	212
Armed Forces	770 253	68 109	12 309	4 157	4 440	5 722	8 689	10 376	4 324	745	509	4 970	-	595 091	107
Not in labor force	10 176 487	3 574 045	244 085	347 239	182 603	204 864	729 481	599 712	272 870	217 163	114 244	328 145	6 724	114 965	6 487
Female	58 021 300	21 296 040	2 797 118	907 137	1 410 258	6 310 649	382 333	3 192 682	191 410	107 478	141 186	3 009 083	838 146	64 396	36 660
Employed in 1970	22 365 705	15 396 112	2 499 044	688 149	998 050	4 611 283	290 764	2 279 428	135 270	72 569	67 103	2 112 653	587 972	35 500	6 934
Professional, technical, and kindred workers	3 714 041	2 668 096	2 223 818	32 522	25 000	148 996	6 406	21 756	2 501	873	1 229	43 936	4 792	7 614	1 038
Managers and administrators, except farm	980 726	792 900	48 400	477 634	47 733	106 159	7 398	14 602	3 334	689	530	33 083	1 616	2 035	165
Sales workers	1 629 533	998 217	18 312	33 612	715 364	82 722	6 083	26 133	5 864	978	1 062	37 399	3 809	2 154	627
Clerical and kindred workers	7 069 324	5 029 349	114 220	94 528	129 143	4 096 178	20 784	108 926	16 182	2 299	2 574	124 232	10 192	9 129	2 030
Craftsmen and kindred workers	442 668	339 727	5 009	5 808	7 254	20 462	210 437	42 630	4 018	648	647	11 735	1 216	3 130	99
Operatives, including transport	3 504 180	2 421 909	15 331	12 452	29 461	59 878	26 308	1 939 609	18 714	3 662	7 995	97 225	23 090	5 674	1 078
Laborers, except farm	239 862	133 498	1 372	2 091	4 273	7 767	2 071	18 181	72 283	430	1 240	8 571	2 218	649	75
Farmers and farm managers	67 019	49 069	620	394	292	802	218	635	92	37 887	3 232	568	213	152	17
Farm laborers and farm foremen	127 296	73 691	584	188	633	1 643	400	3 098	538	20 600	36 656	2 030	1 566	45	53
Service workers, except private household	3 641 574	2 278 025	63 482	26 586	34 846	77 624	9 453	89 997	9 901	3 038	6 391	1 711 164	61 746	3 963	1 359
Private household workers	979 435	611 631	5 896	2 334	4 051	9 052	1 206	13 861	1 843	1 465	5 547	42 710	477 512	905	366
Unemployed	1 025 560	481 988	35 928	13 808	27 187	103 038	11 289	147 813	7 393	1 106	6 457	70 619	21 382	1 717	541
Armed Forces	20 116	5 795	1 284	241	128	1 000	215	292	86	-	54	357	21	9 368	4
Not in labor force	34 609 916	5 412 145	760 862	204 939	384 893	1 995 328	80 055	765 150	48 661	33 803	67 073	818 451	248 771	17 811	29 179

Source: Table taken directly from U. S. Bureau of the Census, Detailed Characteristics, United States Summary, Census of the Population: 1970, PC(1)-D, Table 230, p. 1-782. Washington, D. C.: U. S. Government Printing Office, 1973.

Table 2. Occupational Mobility Between 1965 and 1970 By Sex for the United States Black Population:1970

	Persons 25 years old and over	Occupation of workers in 1965												Armed Forces in 1965	Did not work in 1965 and work in 1965 not reported
		Total working¹	Professional, technical, and kindred workers	Managers and administrators, except farm	Sales workers	Clerical and kindred workers	Craftsmen and kindred workers	Operatives, including transport	Laborers, except farm	Farmers and farm managers	Farm laborers and farm foremen	Service workers, except private household	Private household workers		
Negro															
Male	4 718 003	3 134 966	146 654	77 209	44 371	180 536	416 684	800 617	483 783	58 882	128 752	431 711	16 130	191 842	1 391 994
Employed in 1970	3 333 594	2 682 987	136 303	70 054	39 591	164 690	361 313	707 452	393 495	43 590	105 863	365 354	12 038	114 758	535 819
Professional, technical, and kindred workers	200 078	153 302	114 003	3 370	1 463	6 249	3 598	4 627	2 423	116	225	4 808	21	11 316	35 462
Managers and administrators, except farm	109 150	91 993	8 106	50 055	3 006	4 094	4 371	5 942	3 237	236	150	4 164	36	4 290	13 767
Sales workers	58 091	44 767	1 155	2 499	24 421	2 493	1 412	3 713	1 591	84	240	2 293	64	3 292	9 922
Clerical and kindred workers	241 944	190 905	3 557	2 938	2 778	122 466	5 629	14 865	9 616	456	668	8 632	213	16 559	34 630
Craftsmen and kindred workers	543 348	443 051	2 466	2 711	1 822	3 624	290 435	41 833	30 611	2 424	4 109	14 069	258	18 767	81 530
Operatives, including transport	988 720	811 022	2 512	3 947	2 943	12 265	31 408	567 379	53 673	3 907	11 096	29 902	958	22 929	144 729
Laborers, except farm	515 964	407 919	1 140	1 432	1 036	5 281	12 672	36 661	268 373	5 358	10 269	16 415	720	11 117	96 973
Farmers and farm managers	34 906	26 413	64	101	20	39	264	633	537	20 512	1 542	222	–	194	8 799
Farm laborers and farm foremen	115 450	95 442	112	156	201	130	1 355	3 367	3 970	5 717	72 923	904	67	1 000	19 008
Service workers, except private household	510 256	407 049	3 186	2 743	1 901	6 031	10 079	28 107	21 041	2 754	4 512	280 198	1 252	14 977	88 230
Private household workers	15 687	11 124	–	52	–	18	100	325	423	26	119	767	8 550	89	4 474
Unemployed	151 028	102 179	2 373	1 310	815	3 726	15 728	23 115	22 548	1 488	5 409	11 449	645	6 693	42 154
Armed Forces	71 673	5 583	315	162	189	774	625	1 200	252	29	–	617	–	57 238	8 854
Not in labor force	1 161 705	344 217	7 663	5 683	3 776	11 346	39 018	68 850	64 488	13 775	17 478	54 291	3 447	12 321	805 167
Female	8 660 089	2 387 694	253 739	31 680	46 784	275 829	29 941	342 632	31 399	11 698	39 303	546 451	530 677	8 455	3 263 948
Employed in 1970	2 666 270	1 804 343	221 290	25 695	36 794	230 969	23 616	251 125	22 469	4 366	23 508	417 046	386 379	4 869	857 058
Professional, technical, and kindred workers	322 087	239 551	192 490	1 382	1 626	11 464	504	3 275	291	169	319	8 478	2 566	461	82 675
Managers and administrators, except farm	42 512	34 339	3 723	17 479	1 125	4 326	255	789	259	28	65	2 675	811	137	8 236
Sales workers	59 220	36 205	645	631	21 214	2 836	243	1 824	485	20	88	3 179	1 670	242	22 773
Clerical and kindred workers	417 614	281 846	7 917	2 769	6 515	196 796	1 436	15 226	1 848	84	264	19 460	5 465	1 153	134 615
Craftsmen and kindred workers	40 241	29 459	307	226	395	1 296	16 300	3 684	515	36	191	2 154	769	391	13 391
Operatives, including transport	436 561	285 934	1 925	772	2 061	4 560	2 439	200 941	2 120	438	2 217	20 835	16 561	937	149 695
Laborers, except farm	36 773	23 810	193	194	371	732	413	2 460	12 423	65	488	2 204	1 649	118	12 845
Farmers and farm managers	4 351	1 767	34	20	–	–	–	44	–	1 064	228	34	110	–	2 584
Farm laborers and farm foremen	30 384	17 273	67	19	56	81	81	336	101	929	12 400	406	1 254	45	13 066
Service workers, except private household	716 997	475 422	12 509	1 817	2 678	7 559	1 526	16 936	2 292	726	2 944	338 870	40 357	771	240 804
Private household workers	559 530	378 737	1 460	436	753	1 319	619	5 390	1 105	807	4 304	18 751	315 117	614	180 179
Unemployed	163 653	74 886	2 979	701	1 531	6 332	1 304	19 388	1 672	371	3 535	16 829	13 583	349	88 418
Armed Forces	2 050	330	76	39	–	127	22	41	–	–	–	17	–	957	563
Not in labor force	5 828 116	507 935	29 394	5 225	8 459	38 361	4 999	72 078	7 156	6 961	22 362	112 560	130 763	2 290	2 317 901

¹Includes "Occupation not reported" not shown separately.

Source: Taken directly from U. S. Bureau of the Census, Detailed Characteristics, U. S. Summary, Census of the Population: 1970, PC(1)-D, Table 230, p. 1-782. Washington, D. C.: U. S. Government Printing Office, 1973.

collar occupations were equated with professional, technical, and kindred workers; managers and administrators, except farm; sales workers; and clerical and kindred workers. The blue-collar workers were equated with craftsmen and kindred workers; operatives, including transport operatives; nonfarm laborers; farmers and farm managers; farm laborers and farm foremen; service workers, excepting private household workers; and private household workers. The white-collar participation of black women was below that of non-black females (65.2%) and males (42.4%), but higher than that of black males (18.7%).

In 1970, white-collar stability and upward occupational mobility (i.e., from blue to white-collar) was most pronounced among non-black males, while unemployment and downward occupational mobility were most visible among black females. The percentage increase for non-black males within the white-collar sector was 4.8 percent. That is, whereas 42.4 percent of all employed non-black males within the civilian labor force, for whom occupations were known, in 1965 were in white-collar occupations, in 1970, for the same cohort, 47.2 percent of them were within the white-collar section. Corresponding increases were 1.2 percent for black women, 0.7 for non-black women, and -0.5 for black men. But, although the proportion of white-collar workers of all workers within the employed civilian labor force in both 1965 and 1970 increased for three cohorts, only two cohorts experienced an actual numerical increase. The black female net gain of 19,998 was less than the non-black female gain of 89,081, but more than the black male net decrease of 12,696, and the non-black male net decrease of 699,982.

The bulk of the black female net gain within the white-collar sector occurred within the category of clerical and kindred workers. Their net gain for professional, technical, and kindred workers of only 1,274 women, as compared to 4,592 for black males, 13,511 for non-black females, and 98,349 for non-black males was below par. In the cohorts employed in both 1965 and 1970, black women were 3.1 percent of all professional, technical, and kindred workers, while black men were 1.9 percent, non-black women, 31.8 percent, and non-black men, 63.1 percent. But, although each cohort experienced some increase, when 100.0 percent is regarded as the total increase for all cohorts, then 1.1 percent of the increase could be attributed to black women, as compared to 3.9 percent to black men, 11.5 percent to non-black women, and a highly significant 83.5 percent to non-black males. Thus, the upward mobility was particularly exceptional for non-black males, if all other variables were equal, inasmuch as they only constituted 64.1 percent of the civilian labor force employed in both 1965 and 1970, as compared with 27.0 percent of non-black females, 5.3 percent of black males, and 3.6 percent of black females. Additionally, non-black males were only 42.9 percent of the total United States population, 25 or more years of age, as compared with 47.6 percent for non-black females, 5.2 percent for black females, and 4.3 percent for black males.

All cohorts experienced decreases in blue-collar workers between 1965 and 1970: 29,998 for black women; 25,436 for black men; 451,343 for non-black men; and 79,080 for non-black women. The decreases were at least partial functions of upward and downward mobility. For example, although black women were less than 9 percent of all employed professional, technical, and kindred female workers in 1965, they were almost 25 percent of all such workers who were private household workers in 1970. Of the 386,329 black women employed as private household workers in 1965, and still within the 1970 civilian labor force, 81.6 percent of them were still private household workers, while 10.4 percent were service workers (which could have merely been a change in site of position, such as cleaning in motels instead of cleaning in private homes), and 1.8 percent were in blue-collar occupations other than as service workers. A total of 3.5 percent were unemployed within the labor force, and a mere 2.7 percent had become professional, technical, and kindred workers. However, the scant upward mobility to professional, technical and kindred workers experienced by those black women who were private household workers in 1965 was higher than that experienced by their non-black female counterparts, of whom only 1.1 percent moved into the professional, technical, and kindred category, and of whom 80.5 percent were still private household workers, and 3.9 percent, unemployed.

Comparisons of race-sex cohorts in either the 1965 or the 1970 employed civilian labor force (but not necessarily both) showed net gains in white-collar workers for each. The male gains of 49.8 percent for non-blacks and

33.3 for blacks were higher, as expected, than those of 29.3 percent for blacks and 28.2 percent for non-black females. They also experienced numerical net gains over time in the blue-collar sector. About 126 percent as many black males were employed in blue-collar positions in 1970 than in 1965, as were about 117 percent black women, 113 percent non-black women, and a scant 101 percent non-black males. The scant increase for non-black males, however, should not be interpreted as a substantial gain, or even as a greater gain, for blacks, inasmuch as the non-black male enjoyed a substantially greater increase in white-collar employment over time. Actually, while the non-black male percentage within the blue-collar sector decreased from 66.1 to 62.8 percent over time, the black male increase was less than 2 percentage points, from 7.8 to 9.2 percent, and the non-black female was also less, from 21.0 to 22.3 percent. The least increase, from 5.2 to 5.7 percent, occurred for black females.

Consequently, the overall black female increase in the employed civilian labor force between 1965 and 1970, from 3.9 to 4.3 percent, was due to scant increases in their presence in both sectors of that labor force. The greatest increase, a mere 0.6 percent, was for non-black women, from 31.1 to 31.7 percent, while the black male increase of 0.2 percent represented a shift from 5.2 percent in 1965 to 5.4 percent in 1970. The total percentage increase for all three race-sex groups over time was 1.2 percent, the precise percentage, of course, of the decrease of the non-black male cohort over time.

Occupational mobility patterns reported above for the four race-sex cohorts of (1) persons in both the 1965 and 1970 civilian labor force, and of (2) persons in either the 1965 or 1970 civilian labor force (but not necessarily in both) were not entirely consistent by rank-order of group progress over time. Favorable consistency almost always prevailed for non-black males, the group experiencing the most heightened upward occupational mobility. But, although black females in the 1965 and 1970 labor forces experienced a greater percentage increase over time than was true of their non-black female and black male counterparts, cohort comparisons for those within either labor force over time revealed clearly that black female gains within the white-collar sector were less than those for males, regardless of race, and generally indistinguishable from those of non-black females. Non-black females constituted the group which benefitted most from the slight decrease in the non-black male proportion within the total labor force over time.

While such data as the above, in and of themselves, do not explain the inconsistency in progressive time shifts for any race-sex group, perhaps they suggest that purposive efforts of the federal government to increase career options, beginning at least with the efforts generated by the implementation of the Economic Opportunities Act of 1964, and throughout the next four or five years, until 1970, had the least positive impact upon improved career options (or actual employment) for black women already employed in 1965, and who remained employed in 1970, and especially so for those who were, or who aspired to be professional, technical and kindred workers. This was also the race-sex group which experienced the highest rates of unemployment and downward occupational mobility.

On the other hand, it is plausible that those efforts, coupled with other efforts within the public and private spheres, had the greatest positive impact upon non-black male upward occupational mobility. In addition, the efforts appeared to be much more effective for black males and non-black females than for black females. If so, that phenomena could well be attributed to the greater tendency of the concentration of federal efforts to enhance employment for blacks upon males than upon females, and to enhance employment for females upon whites than upon blacks, which leads to the highly probable theory that relatively little purposive effort likely to yield significant results for black women was directed toward their career options.

EMPLOYMENT PATTERNS AND RELATED DATA, 1970-1974

Changes occurring between 1970 and 197~~0~~4 within the areas of labor force status, number of weeks worked, mean earnings of workers, total money income of families, age distribution of the population, and the number of completed years of schooling for black women, as well as comparisons with black men, white men, and white women, are concentrated upon in this section. The changing patterns of similarity and dissimilarity between labor force participation by black and white women lend some credulity to the earlier expressed proposition of differential effects of efforts to reduce racial or sexual discrimination upon black and white women.

Labor force status. As may be seen in greater detail in Table 3, "Labor Force Status of Blacks and Whites, 16+ Years of Age, By Sex, in March 1974 and April 1970" (page 50), insignificant changes occurred in the percentage of black women, 16 or more years of age who participated within the civilian labor force in 1970 (47.3%) and 1974 (47.4%), with only slight increases also occurring for black and white men. The white female percentage rose from 41.1 percent in 1970 to 44.8 percent in 1974, thereby erasing any significant differences by race in female labor force participation. Thus, the unadgusted-age generalization that black women are more likely than white women to work outside the home is no longer valid.

Age-adjusted rates, of course, reveal continuing racial differences by sex. Specifically, in 1970, white women, 16-19 years of age, were more likely than black women to be within the labor force, and, in 1974, white women under 25 years of age held that distinction. For the remaining age groups, in both years, black women were more likely to be participants, but the racial differences tended to decrease with increasing age.

A slight majority of black women were without the labor force in both years, a fact often obscured in traditional analyses which emphasize more strongly black-white differences. In addition, although black female participation remained generally higher than that of white females, their unemployment rates also remained higher for each age group in both years, with the exception of those who were 65 or more years of age in 1970, and 55 or

TABLE 3

Labor Force Status of Blacks and Whites, 16+ Years of Age, By Sex, in March 1974 and April 1970*

CHARACTERISTIC AND GROUP	AGE (in years) 16-19	20-24	25-34	35-44	45-54	55-64	65+	16+
% in 1974 civilian labor force:								
Black females	28.3	56.3	61.8	61.5	55.1	45.0	9.5	47.7
Black males	43.9	79.5	90.3	88.3	84.3	71.3	20.7	71.3
White males	57.0	80.9	93.1	94.4	93.1	79.1	22.1	77.4
White females	48.2	62.8	51.4	53.0	54.3	41.5	8.1	44.8
% in 1970 civilian labor force:								
Black females	24.5	56.2	58.2	60.0	58.5	44.6	13.6	47.3
Black males	34.1	76.3	88.8	89.0	86.6	74.0	22.0	70.0
White males	47.3	76.3	92.7	94.3	93.5	82.1	25.9	76.5
White females	36.4	56.2	43.1	49.0	52.1	42.1	10.3	41.1
Unemployment rates, 1974:								
Black females	34.9	17.2	6.3	6.7	4.1	2.2	1.1	9.5
Black males	33.1	17.0	9.2	4.9	4.3	2.8	2.7	10.0
White males	13.0	7.6	3.6	2.3	2.8	2.6	2.9	4.3
White females	13.6	6.9	5.3	3.9	3.3	3.3	4.1	5.6
Unemployment rates, 1970:								
Black females	21.6	12.8	8.2	5.8	4.3	3.9	4.2	7.9
Black males	19.3	11.9	5.3	4.5	4.4	4.1	5.1	6.6
White males	10.4	6.4	2.9	2.3	2.5	3.0	4.2	3.6
White females	10.2	6.0	4.7	3.9	3.6	3.2	4.5	4.8

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 11.

more years of age in 1974.

The greater black female unemployment rate in comparison with black males in 1970 also reversed itself in 1974. That is, black females were more likely to b~~g~~e unemployed in 1970, and black males more likely to be unemployed in 1974. However, even here, age differences were evident. Specifically, in 1974, black females under 25 years of age, and between 35 and 44 years of age had greater unemployment than did their black male counterparts. In 1970, black females under 45 years of age were more likely, and those over that age, more likely, than their black male counterparts to experience unemployment.

Between 1970 and 1974, then, participation within the civilian labor force increased the least for black women, and differentiating age patterns of some interest were emerging. The most notable one was the decrease in labor force participation by black elderly women over time, a phenomenon which may explain their significant decrease in unemployment rates over time, and which may have been due partially to the advent of the Federally guaranteed annual income program for the aged, disabled, and blind (Supplementary Security Income).

Weeks worked in 1973 and 1969. A comparison of the number of weeks worked in 1973 and 1969 by black and white civilian females and males, 16 or more years of age, showed slightly greater increases for white females than for any other group (see Table 4, "Weeks Worked in 1973 and 1969 By

TABLE 4

Weeks Worked in 1973 and 1969 by Black and White Civilian Females and Males, 16 Or More Years of Age*

CHARACTERISTIC AND YEAR	Black Females	Black Males	White Males	White Females
1973: % of total, 16+ years of age who worked:	54.9	77.8	84.5	53.3
% of workers (100.0%) who worked:				
50-52 weeks	53.6	65.0	72.9	52.4
48-49 weeks	3.4	3.3	2.7	3.0
40-47 weeks	5.4	5.2	5.7	6.9
27-39 weeks	9.8	7.8	6.0	9.9
14-26 weeks	12.7	9.0	6.3	13.4
13 weeks or less	15.2	9.7	6.8	14.3
1969: % of total, 16+ years of age who worked:	54.6	76.3	84.1	49.6
% of workers (100.0%) who worked:				
50-52 weeks	42.8	58.2	68.6	44.2
48-49 weeks	7.5	8.9	3.6	5.3
40-47 weeks	11.7	10.6	7.1	9.8
27-39 weeks	12.1	7.6	5.9	12.1
14-26 weeks	10.8	6.2	5.7	12.4
13 weeks or less	15.1	8.5	7.1	16.2

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 12.

Black and White Civilian Females and Males, 16 Or More Years of Age," page 53), from 49.6 percent in 1969, to 53.3 percent in 1973. Corresponding increases were from 54.6 to 54.9 percent for black females, 84.1 percent to 84.5 percent for white males, and 76.3 percent to 77.8 percent for black males.

Of greater interest, perhaps, is the increase in the proportion of workers within each race-sex group who were reported as working 50-52 weeks per year. The increase for black women from 42.8 percent in 1969 to 53.6 percent in 1973, was accompanied by an increase from 58.2 percent to 65.0 percent for black men, 68.6 percent to 72.9 percent for white men, and 44.2 to 52.4 percent for white women. Although the shifts were insignificant, black women and men were also somewhat more likely to work more than 27 weeks over time, and white men and women were somewhat less likely to work less than 27 weeks over time.

In 1973, black female workers, then, were less likely than black or white men to be found in fulltime employment, but there was no difference between their status as fulltime workers and that of white women.

Mean earnings in 1973 and 1969 by education. Comparisons of the mean earnings of black and white women and men, 25 or more years of age, with earnings in 1973 and 1969 (where mean earnings were reported in 1973 constant dollars) by education, as shown in Table 5, "Mean Earnings of Black and White Females and Males, 25+ Years of Age, With Earnings in 1973 and 1969 (in constant 1973$), by Education," pp. 55-6, showed the usual relationships between education and income for each race-sex group. That is, education and income were positively correlated. The actual mean earnings also remained consistently higher for white males and black males than for black females. In 1969, white females whose educational level extended through high school completion also outearned black females of similar education, while earnings among postsecondary educational recipients were higher among black than white women. However, in 1973, black women who had completed high school only also outearned their white female counterparts. The higher black female than white female earnings in the upper educational levels can probably be explained by factors related to greater on-the-job serniority for black than white women, and the larger number of offspring by white than black women. That is, in the past, college-educated white women have also been less likely to be in the labor force than their black counterparts because they had more children. The recent decreases in number of offspring by younger black and white college-educated women may well account for increasing similarity in their labor force participation rates when appropriate controls are applied for such factors as marital status and the nature of the spouse's employment, where applicable.

Various economic events did not have the same effects across educational cohorts within each race-sex group across time, nor for different race-sex groups across time. For all persons within each group, mean earnings increased slightly for black females and males and white males between 1969

TABLE 5

Mean Earnings of Black and White Females and Males, 25+ Years of Age, With Earnings in 1973 and 1969 (in constant 1973 $), by Education*

RACE/SEX GROUP AND YEAR	0-17+	Years of Schooling Completed 0-7	8	9-11	12	13-15	16	17+
1973								
Black females	$ 4,127	$2,094	$2,408	$3,244	$ 4,636	$ 5,470	$ 7,480	$10,237
Black males	7,378	5,243	6,285	6,961	8,340	8,729	11,168	13,250
White males	11,672	6,710	8,233	9,718	11,371	12,591	15,423	17,770
White females	4,713	2,921	3,366	3,607	4,543	5,147	6,450	8,570
1969								
Black females	$ 3,915	$2,354	$2,774	$3,357	$ 4,477	$ 5,497	$ 7,540	$10,068
Black males	6,794	4,994	6,237	6,825	7,747	8,821	10,121	13,829
White males	11,435	6,973	8,257	9,778	11,179	12,796	17,041	19,042
White females	4,864	3,501	3,667	4,048	4,755	5,391	6,751	9,108
1973/1969 Percentage Ratios								
Black females	105.4	89.0	86.8	96.6	103.6	99.5	99.2	101.7
Black males	108.6	105.0	100.8	102.0	107.6	99.0	110.3	95.8
White males	102.1	96.2	99.7	99.4	101.7	98.4	90.5	93.3
White females	96.9	83.4	91.8	89.1	95.5	95.5	95.5	94.1
$ Difference in mean earnings, 1973								
Black females - Black males	-$3,251	-$3,149	-$3,877	-$3,717	-$ 3,704	-$ 3,259	-$ 3,688	-$3,013
Black females - White males	- 7,548	- 4,302	- 5,825	- 6,474	- 6,735	- 7,121	- 7,943	- 7,533
Black - White females	- 586	- 827	- 958	- 363	+ 93	+ 323	+ 1,030	+ 1,667
$ Difference in mean earnings, 1969								
Black females - Black males	-$2,879	-$2,640	-$3,463	-$3,468	-$ 3,270	-$ 3,324	-$ 2,581	-$3,761
Black females - White males	- 7,520	- 4,619	- 5,483	- 6,421	- 6,702	- 7,299	- 9,501	- 8,974
Black - White females	- 949	- 1,147	- 893	- 691	- 278	+ 106	+ 789	+ 960

TABLE 5 (cont.)

RACE/SEX GROUP AND YEAR	Years of Schooling Completed 0-17+	0-7	8	9-11	12	13-15	16	17+
Percentage ratio of $ difference in mean earnings, 1973/1969**								
Black females/Black males	-112.9	-119.3	-112.0	-107.2	-113.3	+ 98.0	-142.9	+ 80.1
Black females/white males	-100.4	+ 93.1	-106.2	-100.8	-100.5	+ 97.6	+ 83.6	+ 83.9
Black females/white females	+ 61.7	+ 72.1	-107.3	+ 52.5	+ 33.4	+304.7	+130.5	+173.6

*Source: U. S. Bureau of the Census, Current Population Reports, Series P-23. No. 55, "Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1974 and 1970," U. S. Government Printing Office, Washington, D. C., 1975, Table 10.

**A minus sign (-) means that the $ difference in mean earnings between 1973 and 1969 grew disproportionately larger in a direction unfavorable to black females. That is, the earnings gap widened. A plus sign (+) means that the $ difference in mean earnings between 1973 and 1969 grew disproportionately smaller in a direction favorable to black females. That is, the earnings gap narrowed, or, as in the case of the black females/white females, the gap could have widened. That is, a percentage of 100.0 means no change. One below 100.0 means a narrowing of the gap between the two groups, and one above 100.0 means a widening of the gap between the two groups.

and 1973, with the greatest increase occurring for black males, followed by black females. White females, on the other hand, experienced a slight time decrease. Within each race-sex group, the only ones who experienced higher mean earnings among black females were those who completed high school only and those who had postcollegiate education. These were precisely the educational groups among black males which were the only ones failing to experience higher mean earnings. The only white male group with increased mean earnings were those who completed high school education only, and no white female group experienced any increase whatsoever.

When the mean earnings of black females and males were compared over time, the income gap narrowed only between those who had received one to three years of college and those who had obtained postcollegiate education. In comparison with white males, the gaps narrowed for those who had less than an eighth grade education or more than a high school education. In comparison with white females, the black-white gap narrowed for those with less than an eighth grade education and any high school education. But, they widened in favor of the black female for those with any education beyond high school.

Professional occupational distribution of black females, 1920-1970. Before continuing with data which are more specific about earnings and related areas, it may be useful to examine the distribution of professional occupations among black females in the years 1920, 1940, 1960, and 1970, so as to obtain some idea of the types of changes which have occurred within that area. As may be seen in Table 6 "(Professional Occupational Distribution of Black Females, 1920-1970, page 59), the majority of black females who were professional workers in 1920, professional and technical workers in 1940, or professional, technical, and kindred workers in 1960 or 1970, were non-college or university teachers or nurses in each of those years. Specifically, 89.2 percent were such teachers or nurses in 1920, as were 90.9 percent in 1940, 76.3 percent in 1960, and 62.0 percent in 1970. Thus, as is evident, over the fifty-year period, there was a continuous decrease in the proportion of black female professionals or related workers within these two fields. A part of the decline can be attributed to the lack of direct comparability between the years, and particularly so between 1920 and the remaining years, inasmuch as technical and kindred workers were not included in the earliest year. But, the decline in the proportion who were classified as non-collegiate or university teachers is quite real between 1940 and 1970.

While the decline in the proportion classified as teachers can also be explained partially by increases in the proportion classified as registered nurses between 1940 and 1970, most of the increase can be explained by the expanding proportions classified as health and science technicians, although data shown within Table 6 are for health technicians only.

Since 1920, the general pattern among black professional, technical and kindred workers by sex has been that of a decrease in the proportion of fe-

Table 6. Professional occupational distribution of black females, 1920-70*

Occupation	Year			
	1920	1940	1960	1970
% Professionals, all occupations	2.5	4.1	6.4	11.3
% base for professionals	100.0	100.0	100.0	100.0
% Accountants and/or auditors	---	---	0.8	2.0
% Writers, artists, and entertainers	7.9	3.7	2.9	1.8
% College presidents, professors, and instructors	1.4	1.5	1.1	2.0
% Designers and draftsmen	0.2	0.2	0.2	0.4
% Dietitians and nutrionists	---	---	2.0	2.0
% Lawyers and judges	0.01	0.05	0.1	0.1
% Librarians	0.1	0.7	1.8	1.8
% Natural or life & physical scientists	---	---	0.3	0.4
% Nurses	8.8	10.7	19.3	15.8
% Physicians and surgeons	0.2	0.2	0.3	0.3
% Social scientists	---	---	0.2	0.3
% Social, welfare, or recreation workers	---	0.3	5.0	7.0
% Non-college/university teachers	80.4	80.2	57.0	46.2
% Health technicians	---	---	3.2	4.3
% Other	0.99	2.45	5.8	15.6

Sources: U. S. Bureau of the Census, Population, General Report and Analytical Tables, Vol. II, U. S. Government Printing Office, Washington, D. C., 1922; U. S. Bureau of the Census, Population, The Labor Force, Occupation, Industry, Employment and Income, Vol. 3, Part 1: "United States Summary," U. S. Government Printing Office. Washington, D. C., 1943; U. S. Bureau of the Census, U. S. Census of Population: 1960 Vol. 1, Characteristics of the Population, Part 1, U. S. Summary, U. S. Government Printing Office, Washington, D. C., 1964; and U. S. Bureau of the Census, Census of Population: 1970, Detailed Characteristics, Final Report PC(1)-D1, United States Summary, U. S. Government Printing Office, Washington, D. C., 1973.

males and an increase in the proportion of males within such occupation as those of actors and entertainers, artists, college presidents, college professors, musicians, and elementary and secondary education teachers. In all probability, such fields were becoming more attractive to males, and, given the increasing tendencies for colleges and universities, including the black ones, to hire faculty with the most advanced degrees, and the greater likelihood of the black males (than the black females) to possess such degrees, the continued decrease in the proportion of black females among the ranks of college professors (and not instructors) especially may also be linked with the disproportionate receipt of doctoral training received by them. Such disproportionately smaller representation can, of course, contribute to a reduction in highly educated female models for black female college students, and, perhaps, less encouragement by faculty for them to pursue higher degrees following college graduation.

It also seems possible that a traditional occupational separation by sex is being slowly eroded among blacks, even prior to legislation promoting sex equality, and, perhaps, to a faster degree than is true among whites. It is clear that the proportion of females engaged in such occupations as those of authors, editors, and reporters; designers and draftsmen; lawyers and judges; and physicians and surgeons all show increases over time.

Quite frequently, individuals make the assumption that an increase in the percentage of blacks in any given professional occupation should be equated with occupational progress. And, on occasion, that assumption may be correct. However, such is not always the case. Therefore, it is useful in any consideration of myths and realities to note clearly that black educational, occupational, employment, and income progress cannot be measured, or is typically inappropriately and inaccurately measured by the presumed gains displayed in relevant data over time. The specific case history used here to drive home this point is taken from the State of North Carolina, which contains about one out of every twenty blacks within the United States.

Progess in black professional representation within North Carolina's employed labor force was measured with data from the 1930 and 1970 United States Bureau of the Census decennial censuses for North Carolina and the United States. *Professionals* were all persons listed under *professional services* in 1930 and under *professional, technical, and kindred workers* in 1970. The black percentages in the (1) total population of all colors and ages, (2) total population of all employed persons, (3) total population of all professionally employed persons, and (4) total population of all employed physicians, as well as the *professional percentage* in the (5) total population of all black employed persons for North Carolina and the United States were computed. They were then compared across time (1930, 1970) and region (North Carolina and the United States) for (5) above and wherever else applicable. Otherwise, computed *percentage ratios* [(total population of all professionally employed persons)/(black percentage) and (total population of all employed persons)/(1930 and 1970 black percentages)] were compared across time and region. Progress occurred if the black percentages in (2), (3), and (4) above were more similar in 1970 than in 1930. For example, if blacks were 30 percent of all employed and ten percent of all professionally employed persons in 1930, and 25 percent of all employed and 24 percent of all professionally employed persons in 1970, then black professional representation had progressed over time. All 1930 employment data were for persons 10 or more years of age, and all 1970 employment data were for persons 16 or more years of age.

The numbers and percentages used are given in Table 7 (page 63). The characteristics listed in the left-hand column, such as "population, all ages and colors," indicate the type of data contained in each row. For example, the first row shows a total population of 3,170,276 persons in North Carolina in 1930. The second row shows that 29.0 percent of those persons were black, whereas in 1970, 22.2 percent of the total population in North Carolina were black.

As can be seen from the data in Table 7, between 1930 and 1970, progress in black professional representation was almost nonexistent. In 1930, in North Carolina, blacks were overrepresented in the total employment population in that they were 32 percent of that population, but only 29 percent of the State's total population. Gainful employment was then proportionately higher among blacks than whites. By "chance or luck alone," about 32 percent of all professionally employed persons should also have been black, but less

Table 7. Black Professional Employment in North Carolina and the United States, 1930 and 1970

Characteristic	North Carolina 1930	North Carolina 1970	United States 1930	United States 1970
Population, all ages and colors				
Total number	3,179,276	5,082,059	122,775,046	203,210,158
% black	29.0	22.2	9.7	11.1
Employed persons				
Total number	1,140,971	1,984,402	48,829,920	76,553,599
% black	32.0	18.4	11.3	9.6
Professionally employed persons				
Total number	51,993	218,880	3,253,884	11,351, 138
% black	18.8	11.0	4.2	5.4
Employed blacks				
Total number	365,544	364,673	5,517,781	7,361,143
% professional	2.7	6.6	2.5	8.3
Employed physicians				
Total number	2,288	4,918	153,803	280,929
% black	7.1	4.0	2.5	2.2

than 19 percent were actually black. Thus blacks were clearly underrepresented among North Carolina's 1930 professionals. Black underrepresentation among physicians was even worse. The United States showed a similar pattern. North Carolina was above the national average (*did better than*) in percentages of black professionals within the total black employed *and* the total professionally employed populations, but below that average (*did worse than*) for black percentages within the total number of employed persons *and* of physicians.

By 1970, in both North Carolina and the United States, blacks were underrepresented among all employed persons. That is, gainful employment was proportionately higher among non-blacks. In North Carolina, between 1930 and 1970, the number of employed black males *decreased* by about 18 percent, but employment among black females increased by about 35 percent, by about 57 percent among non-black males, and by 322 percent among non-black females. The professional percentage increased within the total black employed population in both regions across time. But the black proportion within the State's professionally employed and the physician populations, and the nation's physician population decreased over time. Blacks also showed a proportionate gain among all professionally employed persons in the nation between 1930 and 1970.

Inasmuch as the actual number of black professionals in North Carolina increased from 9,789 in 1930 to 24,175 in 1970, their proportionate decrease in the 1970 professionally employed population can be explained by substantially faster increases within the non-black population. Between 1930 and 1970, black male professionals increased by 86 percent, black females by 194 percent, non-black females by 276 percent, and, largest of all, non-black male professionals by 465 percent. However, the black professional increase was not constant across occupations. The total number of black physicians in North Carolina actually declined from 163 in 1930 to 159 in 1970. Black dentists decreased similarly from 67 to 58. In comparison with the nation, the State's rate of increase in black professionals was much slower, with the exception of the major decreases already noted, and with lawyers, where the State's increase surpassed the national average, due perhaps to the State's 1939 establishment of a black law school, a point, incidentally, which further complicates the issue of maintaining or not maintaining predominantly black state-supported institutions of higher education, although that law school contributed insignificantly to the production of black female lawyers throughout most of its first 33 years of existence, and relatively little--but greater--since then.

In general, black professional employment was relatively more suppressed in North Carolina in 1970 than in 1930. The proportionate professional increase among employed blacks was influenced heavily by numerical increases of employable blacks who were unemployed and not within the labor force, not by real growth within the professional proportions. In other words, the apparent black professional increase was largely the result of a decrease in the total number of non-professionally employed blacks. If all the blacks who sought work or who really wanted to work in 1970, but could not obtain a job, were added to the total number of persons within the black labor force, then the professional percentage would probably have been far less than three percent. Total black employment was also more suppressed in 1970 than in 1930 in North Carolina and the United States, with the State's suppression generally contrary to that of the national pattern. For example, fewer numbers of blacks were employed in 1970 than in 1930 in North Carolina, whereas numerically more blacks were employed nationally in 1970 than in 1930.

Hence, in examining changes in occupational and employment patterns for black women in particular, and blacks in general, whether in North Carolina, or anywhere within the United States, great caution should be exercised in those analyses of the changing labor force patterns and their concomitant effects upon blacks, inasmuch as most of the existing analyses or modes of analyses are too simplistic to consider the interacting effects not only of black female participation with that of other relevant race-sex groups, but also to provide sufficient cues about the probability of training in particular areas as they relate to the probability of employment for black females. Certainly, any significant thrust toward training programs for career employment among adult black women without a college education needs to be undertaken in conjunction with Federal commitments to racially and sexually desegregated employment.

Detailed employment patterns of black women in 1970. Table 8 (pages 68-79) shows the total number of employed persons, 16 or more years of age, of all colors, in detailed occupations in the United States in 1970. It also shows the number and percentage of black women in each of those occupations. Black women constituted 4.3 percent of the total number of all employed persons in that year. If all variables influencing employment within the labor force were equal, then one could assume that black women were overrepresented in any given occupation in which their percentage of the total exceeded 4.3 percent. The overrepresentation within particular occupations also suggests areas where black women have experienced less difficulty in seeking employment, areas in which they have been more interested as sources of employment, areas which have been more interested in them as employees, or any combination thereof.

Therefore, it is instructive to list those occupations in which black women were overrepresented in 1970. They are:

home management advisors
librarians
dietitians
registered nurses
therapy assistants
sociologists
file clerks
non-food counter clerks
keypunch operators
postal clerks
receptionists
statistical clerks
telephone operators
clinical laboratory technologists and technicians
health record technologists and technicians
radiologic technologists and technicians
health technologists and technicians not elsewhere classified
social and recreation workers
prekindergarten, kindergarten, and elementary school teachers
vocational and educational counselors
social welfare clerical assistants
enumerators and interviewers
library attendants and assistants

Table 8. Total Number of Employed Persons and the Total Number and Percentage of Employed Black Females in Detailed Occupations in the United States, 1970*

Occupation	Number of Persons: Total	Number of Persons: Black Female	Black Female % of Total
Total number employed, 16+ years of age	76,553,599	3,309,080	4.3
PROFESSIONAL, TECHNICAL & KINDRED	11,351,138	374,041	3.3
Accountants	703,546	7,495	1.1
Architects	56,214	107	0.2
Computer specialists	254,537	2,655	1.0
Computer programers	161,337	1,829	1.1
Computer systems analysts	79,949	707	0.9
Computer specialists, n.e.c.	13,251	119	0.9
Engineers	1,207,509	684	0.06
Aeronautical & astronautical	65,583	19	0.03
Chemical	52,072	40	0.08
Civil	172,977	99	0.06
Electrical & electronic	281,240	147	0.05
Industrial	184,225	204	0.11
Mechanical	177,212	72	0.04
Metallurgical & materials	15,314	5	0.03
Mining	4,515	0	0.00
Petroleum	11,029	5	0.04
Sales	54,270	6	0.01
Engineers, n.e.c.	189,072	87	0.05
Farm management advisors	7,592	131	1.7
Foresters & conservationists	39,808	89	0.2
Home management advisors	5,393	618	11.4***
Lawyers and judges	272,401	497	0.2
Lawyers	260,152	446	0.17
Judges	12,249	51	0.42
Librarians, archivists, & curators	128,734	6,808	5.3***
Librarians	121,852	6,735	5.5***
Archivists & curators	6,882	73	1.1
Mathematical specialists	35,089	737	2.1
Actuaries	4,960	63	1.3
Mathematicians	7,643	113	1.5
Statisticians	22,486	561	2.5

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Life & physical scientists	202,489	1,486	0.7
Agricultural	12,705	23	0.2
Atmospheric & space	5,775	34	0.6
Biological	29,380	714	2.4
Chemists	108,486	635	0.6
Geologists	19,800	21	0.1
Marine	3,153	9	0.3
Physicists & astronomers	21,941	45	0.2
Life & physical, n.e.c.	1,249	5	0.4
Operations & systems researchers & analysts	79,478	443	0.6
Personnel & labor relations workers	290,756	6,276	2.2
Physicians, dentists, related practitioners	538,746	1,855	0.3
Chiropractors	13,729	11	0.08
Dentists	90,801	115	0.1
Optometrists	17,219	12	0.07
Pharmacists	109,642	588	0.5
Physicians, medical & osteopathic	280,929	1,051	0.4
Podiatrists	6,026	55	0.9
Veterinarians	19,435	18	0.09
Health practitioners, n.e.c.	965	5	0.5
Registered nurses, dietitians, & therapists	944,983	69,620	7.4***
Dietitians	40,131	7,514	18.7***
Registered nurses	829,691	59,007	7.1***
Therapists	75,161	3,099	4.1***
Health technologists & technicians	259,839	16,151	6.2***
Clinical laboratory technologists/nicians	117,606	7,288	6.2***
Dental hygienists	15,805	234	1.5***
Health record technologists/technicians	11,164	490	4.4***
Radiologic technologists/technicians	52,230	2,489	4.8***
Therapy assistants	3,211	310	9.6***
Health technologists/technicians, n.e.c.	59,823	5,340	8.9***
Religious workers	253,676	1,031	0.4
Clergymen	218,067	500	0.2
Religious workers, n.e.c.	35,609	531	1.5***
Social scientists	108,513	1,075	1.0
Economists	65,948	362	0.5
Political Scientists	904	3	0.3
Psychologists	27,830	501	1.8
Sociologists	1,318	65	4.9
Urban and regional planners	9,053	97	1.1
Social scientists, n.e.c.	3,460	47	1.4

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Social and recreation workers	265,954	25,778	9.7***
Social	216,623	22,771	10.5***
Recreation	49,331	3,007	6.1
Teachers, college and university	486,221	7,599	1.6
Biology	20,592	166	0.8
Chemistry	15,714	47	0.3
Engineering	16,523	36	0.2
Physics	13,961	28	0.2
Other life and physical sciences	8,867	11	0.1
Mathematics	25,947	291	0.1
Economics	9,854	15	0.2
English	38,469	671	1.7
History	16,280	127	0.8
Miscellaneous social sciences	31,540	446	1.4
Other specified teachers	150,720	2,421	1.6
Not specified teachers	137,752	3,340	2.4
Teachers, except college and university	2,741,948	172,372	6.3***
Adult education	50,166	1,905	3.8
Elementary school	1,413,915	113,544	8.0***
Prekindergarten and kindergarten	124,996	13,941	11.2***
Secondary school	1,001,509	39,689	4.0
Teachers, n. e. c.	151,362	3,293	2.2***
Engineering and science technicians	803,153	4,820	0.6
Agricultural & biological, except health	31,715	509	1.6
Chemical	60,367	688	1.1
Draftsmen	295,115	731	0.2
Electrical & electronic engineering	154,177	574	0.4
Industrial engineering	20,334	100	0.5
Mechanical engineering	13,249	31	0.2
Mathematical	770	0	0.0
Surveyors	59,368	126	0.2
Engineering and science, n.e.c.	178,058	2,061	1.2
Technicians, except health, and engineering and science	155,492	1,075	0.7
Airplane pilots	50,404	5	0.001
Air traffic controllers	25,293	76	0.3
Embalmers	4,749	64	1.3
Flight engineers	6,345	0	0.0
Radio operators	28,376	268	0.9
Tool programers, numerical control	3,083	61	2.0
Technicians, n.e.c.	37,242	601	1.6

Table 8. (cont.)

Occupation	Number of Persons Total	Number of Persons Black Female	Black Female % of Total
Vocational and educational counselors	106,679	5,469	5.1
Writers, artists, and entertainers	753,957	6,643	0.9
Actors	9,728	224	2.3
Athletes and kindred workers	48,493	270	0.6
Authors	25,376	142	0.6
Dancers	5,950	383	6.4***
Designers	108,788	874	0.8
Editors and reporters	146,925	1,445	1.0
Musicians and composers	87,834	1,096	1.2
Painters and sculptors	100,893	535	0.5
Photographers	64,691	368	0.6
Public relations men and publicity writers	73,744	720	1.0
Radio and television announcers	21,226	60	0.3
Writers, artists, entertainers, n.e.c.	60,036	526	0.9
Research workers, not specified	115,957	1,284	1.1
Professional, technical, and kindred workers--allocated	532,474	31,243	5.9
MANAGERS AND ADMINISTRATIONS, EXCEPT FARM	6,371,149	48,098	0.8
Assessors, controllers, and treasurers; local public administration	28,002	91	0.3
Bank officers and financial managers	309,438	1,520	0.5
Buyers and shippers, farm products	19,836	13	0.06
Buyers, wholesale and retail trade	174,741	1,198	0.7
Credit men	58,962	312	0.5
Funeral directors	35,800	455	1.3
Health administrators	84,135	2,201	2.6
Construction inspectors; public administration	18,474	30	0.2
Inspectors, except construction; public administration	80,205	882	1.1
Federal public admin. & postal service	50,370	589	1.2
State public administration	19,908	70	0.4
Local public administration	9,927	163	1.6
Managers & superintendents, building	83,119	1,231	1.5
Officers, pilots, and pursers; ship	24,618	10	0.04
Officials and administrators; public administration, n. e. c.	245,778	3,871	1.6
Federal public admin. & postal service	119,182	2,186	1.8
State public administration	48,582	429	0.9
Local public administration	78,014	1,256	1.6

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
Officials of lodges, societies, and unions	50,085	461	0.9
Postmasters and mail superintendents	35,314	63	0.2
Purchasing agents and buyers, n.e.c.	161,438	1,107	0.7
Railroad conductors	39,445	27	0.07
Restaurant, cafeteria, and bar managers	321,209	8,086	2.5
Sales managers and department heads, retail trade	206,393	1,405	0.7
Sales managers, except retail trade	246,288	178	0.07
School administrators, college	38,928	529	1.4
School administrators, elementary & secondary	173,263	4,743	2.7
Managers & administrators, n.e.c., salaried	2,800,526	11,499	0.4
Construction	251,602	169	0.07
Manufacturing	684,354	743	0.1
Transportation	141,241	220	0.2
Communications, & utilities & sanitary	113,775	519	0.4
Wholesale trade	253,782	271	0.1
Retail trade	681,114	2,751	0.4
Finance, insurance & real estate	187,568	902	0.5
Business and repair services	140,772	444	0.3
Personal services	132,113	1,591	1.2
All other industries	184,205	3,889	2.1
Managers & administrators, n.e.c., self-employed	901,663	4,678	0.5
Construction	137,923	134	0.1
Manufacturing	66,106	94	0.1
Transportation	21,030	8	0.04
Communications & utilities & sanitary	2,594	0	0.00
Wholesale trade	54,993	75	0.1
Retail trade	428,141	3,106	0.7
Finance, insurance, and real estate	24,086	36	0.1
Business and repair services	52,235	136	0.3
Personal services	88,530	841	1.0
All other industries	26,025	248	1.0
Managers & administrators, except farm, allocated	236,485	3,568	1.5
SALES WORKERS	5,445,374	84,433	1.6
Advertising agents and salesmen	62,676	184	0.3
Auctioneers	4,780	9	0.2
Demonstrators	37,854	783	2.1***
Hucksters and peddlers	117,562	1,805	1.5***
Insurance agents, brokers & underwriters	455,624	3,334	0.7
Newsboys	61,622	151	0.2
Real estate agents and brokers	262,161	1,338	0.5
Stock and bond salesmen	97,279	295	0.3
Salesmen and sales clerks, n.e.c.	4,019,531	64,435	1.6
Sales workers--allocated	326,285	12,099	3.7

Table 8. (cont.)

Occupation	Number of Persons Total	Number of Persons Black Female	Black Female % of Total
CLERICAL AND KINDRED WORKERS	13,748,260	684,950	5.0***
Bank tellers	249,243	8,260	3.3***
Billing clerks	106,001	3,757	3.5***
Bookkeepers	1,534,768	31,542	2.0***
Cashiers	823,512	42,681	5.2***
Clerical assistants, social welfare	1,198	177	14.8***
Clerical supervisors, n.e.c.	112,722	4,062	3.6
Collectors, bill and account	51,325	1,182	2.3
Counter clerks, except food	227,530	10,433	4.6***
Dispatchers and starters, vehicle	59,849	952	1.6
Enumerators and interviewers	64,568	3,473	5.4***
Estimators and investigators, n.e.c.	265,181	7,453	2.8
Expediters and production controllers	204,071	3,162	1.5
File clerks	356,660	38,276	10.7***
Insurance adjusters, examiners, & investigators	95,968	2,017	2.1
Library attendants and assistants	123,327	6,896	5.6***
Mail carriers, post office	252,524	2,953	1.2
Mail handlers, except post office	125,108	6,163	4.9
Messengers, including telegraph, and office boys	55,413	1,518	2.7
Meter readers, utilities	33,015	46	0.1
Office machine operators	552,580	42,378	7.7***
Bookkeeping and billing machine	63,268	3,745	5.9***
Calculating machine	34,896	1,803	5.2***
Computer and peripheral equipment	117,222	2,982	2.5
Duplicating machine	20,265	1,153	5.7***
Keypunch	272,570	29,814	10.9***
Tabulating machine	8,160	402	4.9
Office machine, n.e.c.	36,199	2,479	6.8***
Payroll and timekeeping clerks	155,717	5,008	3.2***
Postal clerks	301,927	28,595	9.5
Proofreaders	28,099	887	3.2***
Real estate appraisers	21,381	49	0.2
Receptionists	302,912	14,647	4.8***
Secretaries	2,702,099	87,886	3.2***
Shipping and receiving clerks	410,461	6,510	1.6
Statistical clerks	249,322	12,691	5.1***
Stenographers	127,957	5,520	4.3***
Stock clerks and storekeepers	450,806	11,544	2.6
Teacher aides, except school monitors	130,005	24,261	18.7***
Telegraph operators	12,257	278	2.3
Telephone operators	407,001	40,452	9.9***
Ticket, station, and express agents	98,037	2,550	2.6
Typists	977,446	85,394	8.7***
Weighers	38,887	1,363	3.5
Miscellaneous clerical workers	474,840	26,198	5.5***
Not specified clerical workers	807,244	39,443	4.9***
Clerical and kindred workers--allocated	757,209	74,293	9.8***

Table 8. (cont.)

Occupation	Number of Persons Total	 Black Female	Black Female % of Total
CRAFTSMEN AND KINDRED WORKERS	10,609,630	47,372	0.4
Automobile accessories installers	6,724	75	1.1
Bakers	109,192	4,207	3.8
Blacksmiths	10,227	11	0.1
Boilermakers	29,545	35	0.1
Bookbinders	34,034	1,998	5.9***
Brickmasons and stonemasons	162,242	398	0.2
Bulldozer operators	88,448	224	0.2
Cabinetmakers	67,513	270	0.4
Carpenters	842,341	999	0.1
Carpet installers	43,967	47	0.1
Cement and concrete finishers	65,579	397	0.6
Compositors and typesetters	157,403	1,351	0.8
Cranemen, derrickmen, and hoistmen	152,271	346	0.2
Decorators and window dressers	69,960	1,775	2.5
Dental laboratory technicians	26,608	440	1.6
Electricians	468,459	737	0.2
Electric power linemen and cablemen	101,892	123	0.1
Electrotypers and stereotypers	7,013	8	0.1
Engravers, except photoengravers	8,694	103	1.2
Excavating, grading, and road machine operators, except bulldozer	221,535	250	0.1
Floor layers, except tile setters	21,333	18	0.1
Foreman, n. e. c.	1,590,427	8,202	0.5
Forgemen and hammermen	15,373	75	0.5
Furniture and wood finishers	21,244	614	0.3
Furriers	2,667	55	2.0
Glaziers	25,020	82	0.3
Heat treaters, annealers, and temperers	20,309	58	0.3
Inspectors, scalers, and graders, log and lumber	17,052	530	3.1
Inspectors, n.e.c.	117,808	1,604	1.4
Jewelers and watchmakers	37,119	362	1.0
Job and die setters, metal	84,881	98	0.1
Locomotive engineers	49,340	20	0.04
Locomotive firemen	13,020	16	0.1
Machinists	378,653	1,396	0.4
Mechanics and repairmen	2,443,912	4,592	0.2
Air conditioning, heating, & refrigeration	117,592	70	0.06
Aircraft	140,215	422	0.3
Automobile body repairmen	107,638	100	0.1
Automobile mechanics	804,772	1,300	0.2
Data processing machine repairmen	31,708	77	0.2
Farm implement	33,557	30	0.1
Heavy equipment mechanic, including diesel	582,475	1,009	0.2

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Females	% of Total
Mechanics and repairmen, continued			
Household appliance and accessory installers and mechanics	122,823	229	0.2
Loom fixers	21,003	21	0.1
Office machine	39,500	43	0.1
Radio and television	137,449	414	0.3
Railroad and car shop	55,615	45	0.1
Miscellaneous mechanics and repairmen	176,594	641	0.4
Not specified mechanics & repairmen	72,971	191	0.3
Millers; grain, flour, and feed	7,130	11	0.2
Millwrights	78,422	81	0.1
Molders, metal	54,063	707	1.3
Motion picture projectionists	15,462	37	0.2
Opticians, and lens grinders & polishers	27,380	507	1.8
Painters, construction & maintenance	327,329	1,055	0.3
Paperhangers	10,260	24	0.2
Pattern and model makers, except paper	38,924	79	0.2
Photoengravers and lithographers	32,670	244	0.7
Piano and organ tuners and repairmen	6,869	19	0.3
Plasterers	28,710	108	0.4
Plumbers and pipe fitters	381,879	365	0.1
Power station operators	18,309	38	0.2
Pressmen and plate printers, printing	156,672	1,476	0.9
Rollers and finishers, metal	19,642	135	0.7
Roofers and slaters	58,274	101	0.2
Sheetmetal workers and tinsmiths	154,207	303	0.2
Shipfitters	10,601	36	0.3
Shoe repairmen	31,163	420	1.3
Sign painters and letterers	18,943	92	0.5
Stationary engineers	170,726	221	0.1
Stone cutters and stone carvers	6,309	29	0.4
Structural metal craftsmen	73,966	49	0.07
Tailors	67,582	2,228	3.3
Telephone installers and repairmen	238,729	741	0.3
Telephone linemen and splicers	52,030	64	0.1
Tile setters	31,602	66	0.2
Tool and die makers	201,945	249	0.1
Upholsterers	62,055	1,157	1.9
Craftsmen and mindred workers, n.e.c.	85,127	451	0.5
Former members of the Armed Forces	438	11	2.5
Craftsmen and kindred workers--allocated	626,534	4,752	0.8

Table 8. (cont.)

	Number of Persons		Black Female
Occupation	Total	Black Females	% of Total
OPERATIVES, EXCEPT TRANSPORT	10,498,525	533,496	5.1
Asbestos and insulation workers	24,340	58	0.2
Assemblers	943,907	51,082	5.4
Blasters and powdermen	7,087	26	0.4
Bottling and canning operatives	46,477	1,877	4.0
Chainmen, rodmen, and axmen; surveying	10,561	36	0.3
Checkers, examiners, & inspectors;manufacturing	690,173	28,533	4.1
Clothing ironers and pressers	181,200	55,384	30.6***
Cutting operatives, n.e.c.	174,236	5,170	3.0
Dressmakers and seamstresses, except factory	96,280	8,223	8.5***
Drillers, earth	57,208	327	0.6
Dry wall installers and lathers	43,700	25	0.06
Dyers	23,837	342	1.4
Filers, polishers, sanders, & buffers	114,173	3,732	3.4
Furnacemen, smeltermen, and pourers	65,216	448	0.7
Garage workers & gas station attendants	424,308	879	0.2
Graders and sorters, manufacturing	38,008	2,977	7.8***
Produce graders & packers, except factory,farm	26,530	1,343	5.1***
Heaters, metal	6,775	28	0.4
Laundry and drycleaning operatives, n.e.c.	169,375	29,997	17.7***
Meat cutters & butchers, except manufacturing	200,881	1,891	0.9
Meat cutters & butchers, manufacturing	67,491	4,375	6.5
Meat wrappers, retail trade	44,095	1,716	3.9***
Metal platers	31,114	255	0.8
Milliners	2,038	182	8.9***
Mine operatives, n.e.c.	155,056	263	0.2
Mixing operatives	68,249	574	0.8
Oilers and greasers, except auto	45,503	160	0.4
Packers & wrappers, except meat and produce	515,516	38,513	7.5***
Painters, manufactured articles	113,963	2,213	1.9
Photographic process workers	62,514	2,256	3.6
Precision machine operatives	411,093	2,834	0.7
Punch and stamping press operatives	159,380	4,250	2.7
Riveters and fasteners	25,194	967	3.8
Sailors and deckhands	24,707	74	0.3
Sawyers	99,753	1,114	1.1
Sewers and stitchers	867,402	78,346	9.0***
Shoemaking machine operatives	60,483	1,495	2.5***
Solderers	40,251	3,328	8.3***
Stationary firemen	94,287	493	0.5
Textile operatives	429,308	29,330	6.8***
Welders and flamecutters	537,702	3,576	0.7
Winding operatives,n.e.c.	60,789	2,617	4.3***
Miscellaneous and not specified operatives	2,520,504	98,855	3.9
Operatives, except transport--allocated	717,374	63,332	8.8

Table 8. (cont.)

Occupation	Number of Persons Total	 Black Female	Black Female % of Total
TRANSPORT EQUIPMENT OPERATIVES	2,957,935	13,195	0.4
Boatmen and canalmen	4,955	27	5.4
Bus drivers	235,942	4,084	1.7
Conductors & motormen, urban rail transit	9,557	79	0.8
Deliverymen and routemen	620,300	1,755	0.3
Fork lift and tow motor operatives	216,859	707	0.3
Motormen; mine, factory, logging camp, etc.	9,795	12	0.1
Parking attendants	30,491	157	0.5
Railroad brakemen	47,381	82	0.2
Railroad switchmen	52,263	112	0.2
Taxicab drivers and chauffeurs	151,644	1,606	1.0
Truck drivers	1,379,625	3,247	0.2
Transport equipment operatives--allocated	199,123	1,327	0.7
LABORERS, EXCEPT FARM	3,431,282	49,435	1.4
Animal caretakers, except farm	46,266	538	1.2
Carpenters' helpers	43,478	200	0.5
Construction laborers, except carpenters' helpers	556,952	2,371	0.4
Fishermen and oystermen	27,106	139	0.5
Freight and material handlers	539,563	8,598	1.6
Garbage collectors	71,417	455	0.6
Gardeners & groundskeepers, except farm	294,820	1,746	0.6
Longshoremen and stevedores	43,054	234	0.5
Lumbermen, raftsmen, & woodchoppers	79,507	430	0.5
Stock handlers	586,107	12,859	2.2
Teamsters	7,439	53	0.7
Vehicle washers & equipment cleaners	116,539	3,272	2.8
Warehousemen, n.e.c.	106,673	621	0.6
Miscellaneous and not specified laborers	620,939	12,730	2.0
Laborers, except farm--allocated	291,422	5,189	1.8
FARMERS AND FARM MANAGERS	1,418,746	5,518	0.4
Farmers, owners, and tenants	1,279,420	2,101	0.2
Farm managers	60,556	97	0.2
Farmers & farm managers--allocated	78,770	3,320	4.2
FARM LABORERS AND FARM FOREMEN	948,309	34,648	3.6
Farm foremen	32,622	277	0.8
Farm laborers, wage workers	743,219	25,856	3.5
Farm laborers, unpaid family workers	92,742	1,053	1.1
Farm service laborers, self-employed	3,983	125	3.1
Farm laborers & farm foremen--allocated	75,743	7,337	9.7

Table 8. (cont.)

Occupation	Number of Persons: Total	Number of Persons: Black Female	Black Female % of Total
SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD	8,627,360	843,345	9.8***
Cleaning service workers	1,861,502	205,045	13.4
Chambermaids & maids	196,767	72,581	36.9***
Cleaners and charwomen	439,063	92,745	21.1***
Janitors and sextons	1,225,672	39,719	3.2
Food service workers	2,773,573	230,411	8.3***
Bartenders	188,769	1,344	0.7
Busboys	94,412	3,223	3.4
Cooks	828,977	112,404	13.6***
Dishwashers	166,110	12,301	7.4
Food counter and fountain workers	151,381	11,556	7.6***
Waiters/Waitresses	1,019,400	45,320	4.4***
Food service workers, n.e.c.	324,524	44,263	13.6***
Health service workers	1,180,513	223,556	18.9***
Dental assistants	88,175	2,834	3.2***
Health aides, except nursing	118,907	18,689	15.7***
Health trainees	17,655	1,186	6.7***
Lay midwives	675	226	33.5***
Nursing aides, orderlies, and attendants	717,968	150,666	21.0***
Practical nurses	237,133	49,955	21.1***
Personal service workers	1,154,208	79,675	6.9***
Airline stewardesses	32,654	682	2.1***
Attendants, recreation & amusement	68,092	1,063	1.6
Attendants, personal service, n.e.c.	59,792	5,903	9.9***
Baggage porters and bellhops	18,640	184	1.0
Barbers	167,256	2,026	1.2
Boarding & lodging housekeepers	7,371	418	5.7***
Bootblacks	3,659	71	1.9
Child care workers	131,258	17,234	13.1***
Elevator operators	35,204	4,249	12.1
Hairdressers and cosmetologists	471,536	31,782	6.7***
Housekeepers	103,332	9,379	9.1***
School monitors	26,007	1,594	6.1***
Ushers, recreation & amusement	14,103	220	1.6
Welfare service aides	15,304	4,870	31.8***
Protective service workers	952,237	7,860	0.1
Crossing guards & bridge tenders	41,645	3,118	7.5***
Firemen, fire protection	176,898	99	0.06
Guards and watchmen	318,264	2,636	0.8
Marshals and constables	5,116	27	0.5
Policemen and detectives	375,494	1,773	0.5
Sheriffs and bailiffs	34,820	207	0.6
Service workers -- allocated	705,327	96,798	13.7***

Table 8. (cont.)

Occupation	Number of Persons		Black Female
	Total	Black Female	% of Total
PRIVATE HOUSEHOLD WORKERS	1,145,891	590,549	51.5***
Child care workers	212,187	26,020	12.3***
Cooks	31,297	18,571	59.3***
Housekeepers	100,695	39,894	39.6***
Laundresses	11,751	2,322	36.8***
Maids and servants	666,864	417,600	62.6***
Private household workers--allocated	123,097	84,142	68.4***
PRIVATE HOUSEHOLD WORKERS			
Living arrangement: living in	75,303	16,636	22.1
living out	1,070,588	573,913	53.6

Source of data: U. S. Bureau of the Census, Census of Population: 1970, *Detailed Characteristics*, Final Report PC(1)-D1, United States Summary, U. S. Government Printing Office, Washington, D. C., 1973. Totals summed and percentages were computed from data in Table 223.

dancers
calculating machine operators
duplicating machine operators
office machine operators not elsewhere classified
typists
bookbinders
assemblers
dressmakers and seamstresses located without factories
laundry and drycleaning operatives not elsewhere classified
milliners
non-meat and non-produce packers and wrappers
textile operatives
chambermaids and maids
cooks
food counter and fountain workers
food service workers not elsewhere classified
lay midwives
nursing aides, orderlies, and attendants
boarding and lodging housekeepers
child care workers outside of private households
hairdressers and cosmetologists
school monitors
welfare service aides
private household workers.
bookkeeping and billing machine operators
tabulating machine operators
teacher aides except school monitors
miscellaneous and non-specific clerical workers
clothing ironers and pressers
manufacturing graders and sorters
non-farm and non-factory produce graders and packers
manufacturing meat cutters and butchers
sewers and stitchers
solderers
bus drivers
cleaners and charwomen
dishwashers
waitresses
non-nursing health aides
health trainees as health service workers
practical nurses
personal service attendants without private households and not elsewhere classified
elevator operators
housekeepers without private households
crossing guards and bridge tenders

The list presented immediately above is deceptive if one considers the fact that the majority of the occupations there listed are female-dominated occupations. Consequently, since black women comprised 11.4 percent of all employed women in 1970, most of those occupations can be eliminated from any consideration of ones in which black females were overrepresented, if one ascribes generally to the usual sexual division of labor characteristic of the American labor force.

The significant black female overrepresentation among private household workers is too familiar by now to warrant much additional comment. Worth noting, however, is the fact that 62.6 percent of all maids and servants in private household work in 1970 were black females. But they comprised only 12.3 percent of all childcare workers within those private households. Black females were concentrated principally in positions as cooks, maids, and servants within those households.

Among the detailed occupations for Service Workers, black females were overrepresented among all employed females in the specific and expected occupations of chambermaids and maids; cleaners and charwomen; lower-level health service workers; and childcare workers. Overrepresentation among childcare workers without private households may be due to the larger proportion of black than white preschool children found in childcare facilities. It may also be due to various federal support patterns which encourage minority hiring. Certainly, it seems likely that federal regulations with respect to hiring were primarily responsible for the black female overrepresentation in such positions as those of welfare service aides and social welfare clerical assistants. A different cause must be used in explaining the overconcentration of black females among the lay midwives. Such a cause may well be related to earlier forms of anti-black discrimination practiced by many Southern hospitals less than two to three decades ago.

Also of interest are the few occupations which were not female-dominant, and in which a higher proportion of black females were located than one would

(10) The Development and Stabilization of an Experience-Based Career Education Program, and Phase I Replication Planning

(11) R&D Monograph on Experience-Based Career Education Program

(12) Assessment of the Experience Based Career Education Program

(13) Career Intern Program

(14) State Level Study in Career Education

(15) Response to Educational Needs Projects

(16) Legal Constraints to External Higher Education Degree Program, with Statutory Models for Reform and Regulation

(17) Schooling, Training and Experience: Econometric Investigations of Determinants and Returns

(18) A History of Adult Degree Programs, 1945-1970

(19) Education and Social Strucutre: An Historical Study of Iowa

(20) Simulated Occupational Choice: A Criterion of Competence in Career Decision-Making

(21) Sex as a Factor Influencing Career Recommendations of Public School Guidance Counselors

(22) The Role of Women in American Society

(23) The Impact of Colleges and Universities on Educational and Occupational Aspirations of Women

(24) Toward a Temporal Sequence of Educational Attainment--Career Contingencies of Youth: The First Three Post-High School Years

(25) The Impact of Educational Attainment on Fertility and Female Labor Force Behavior

(26) Education, Pay, and Job Satisfaction

(27) Evaluation and Analysis of the Satellite Program in School District 21, New York City

(28) The Relative Effectiveness of Proprietary versus Public Vocational Education

(29) An Empirical Estimation of the Impact of Alternative Postsecondary Educational Policies

(30) Effects of Education on the Occupational Achievement of Various Ethnic Groups

(31) Educational Requirements for the Public Sector

(32) Social-Psychological and Cultural Factors Related to Achievement and Aspirations of Urban Community College Students

(33) Education, Expectancies and Employment of Women and Minorities

(34) Effects of Social Class Backgrounds on the Career Commitment of Women Attending Non-Elite Colleges

(35) New Estimates of the Effects of Family Background, Test Scores, Personality, and Years of Schooling on Economic Success

(36) Life History Data on the Occupational Effects of Obtaining Educational Credentials through Alternate Routes

(37) The Development of Career Awareness in Children

(38) Evaluating the Returns to the Education of Women

(39) Fifteen Years After High School--The Impact of Adolescent Social System on Subsequent Occupational Achievement

(40) Noncompleters in Public and Proprietary Schools

Some few of these projects included black females within their samples, so their results should be examined with especial care, due to the general dearth of data about the relationships between education and work for black women. Additional studies in these areas, however, are being funded by other federal agencies, and particularly by the U. S. Department of Labor. It may be well to consider the possibility of a comprehensive, longitudinal study, employing a national probability sample, so as to learn more about work and education for black women

ASSORTED LITERATURE

As previously noted, the literature within the social sciences and education pertaining to relationships between education and work for black women is sparse. It is also fragmented and inconclusive. Extremely few studies investigating these phenomena have used black female subjects. Those few studies which have concentrated upon such relationships for black women have usually used nonrepresentative samples, or have derived their findings solely from cross-sectional data. Comparisons between these few studies are often limited, due largely to their theoretical, methodological, and temporal differences. These criticisms apply equally as well to localized, regionalized, and national samples of black women. They also apply to studies which have concentrated upon specific subsets of black women, such as those about college students.

Nevertheless, the literature does contain some findings about black women which can be helpful in furthering our knowledge and understanding of the relationships between education and work for them, at least to the extent of generating hypotheses for investigation.

The most impressive literature pertaining to relationships between education and work (see, e.g., Blau and Duncan, 1967; Duncan, Featherman, and Duncan, 1972; and Sewell and Hauser, 1975) contains findings derived from male samples. That literature which compares black and white males (see, e.g., Duncan, Featherman, and Duncan, 1972) converges on the finding that racial variations do occur. Duncan, *et. al* (1972:50-51) concluded that one extremely significant barrier to occupational achievement was membership in the black racial category. Their analyses showed that "all of the measurable influences on achievement are appreciably modified in their effects by membership in this racial category." Inadequate data prevented them from developing separate models of the black male socioeconomic life cycle, leading from family to schooling to job. They noted, however, that

> It requires no new research, of course, to show that blacks do not enjoy as high a level of occupational status as whites, and that they suffer various disadvantages might constitute part of the explanation for differential occupational achievement. What has been lacking in the considerable amount of research published on this topic is an assessment of the extent to which family background can account for racial differentials in occupational achievement. *If it were true that white men with comparable disadvantaged family backgrounds did no better in the pursuit of occupational status than the average for blacks, the racial differential would be "explained" by family background. This, however, is far from being true--a point that has not been fully appreciated by those who diagnose the problems of blacks as being due in large part to a "culture of poverty*...."
>
> For blacks...it happens that men with low origins tend to remain at low occupational levels, while those (few) with higher origins tend to fall to low status levels. The typical destination of blacks, regardless of level of origin, is the lower category of manual jobs. The typical destination for whites, on the contrary, depends on where they originate....the slope of respondent's occupation on father's occupation is less steep for blacks than for whites...the correlation between respondent's and father's occupation is lower for blacks than for whites; and...these differences are superimposed upon the lower mean levels of both black social origins and achieved occupational statuses (Duncan, *et al*., 1972:55-56, *italics added*).

Duncan, et al. (1972) were somewhat doubtful about the effects of family planning programs in reducing economic disadvantages by race, since they found that, in their data, the maximum effect of equalizing black and white fertility and socioeconomic backgrounds eliminated less than one-third of the income gap. They were also suspicious of the customarily large weight assigned to family stability:

> In view of the well-known vulnerability of Negro families to disruptive forces, there has been a widespread suspicion that racial differences in prevalence of family instability constitute an important part of the explanation of racial differences in occupational and other forms of achievement. Even a cursory analysis, however, suffices to show that no great part of such an explanation can be reached through this factor alone....the primary source of black-white achievement differentials lies elsewhere than in racial differentials in social backgrounds and family composition. With respect to the latter, however, it is family size, rather than family stability, which is more significant as a source of variation in occupational achievement (with caution taken for our ability to measure the effects of stability in the OCG data). Race per se being more important than family characteristics, a more detailed analysis of the relevance of family stability for black and white occupational success is a pursuit of second-order effects rather than of primary influences.... black Americans are disadvantaged both by the low status of their families of orientation and by handicaps to educational and occupational achievement superimposed upon the family factors. The impediments are especially severe for Negroes. Only about one-fourth of the income gap between black and white men can be attributed to the three family characteristics in the basic model (head's education and occupation and family size). Other major components are due to educational discrimination (unequal education attained by men with equivalent family backgrounds), occupational discrimination (unequal occupational achievement for men with equivalent education and family backgrounds), and economic discrimination (unequal earnings for men in the same kinds of occupations, with the same number of years of schooling, and with equivalent family backgrounds). Number of siblings is a consistently negative influence on occupational achievement,

> operating mainly via its depressing effect on educational attainment, but sex composition of sibship seems irrelevant--rearing in a broken family is somewhat unfavorable for occupational achievement for blacks and whites, but family stability is not a major factor in the explanation of racial differences in occupational success (Duncan, et al., 1972:66-67).

Duncan, et al. (1972:107, 130, 169, 257) also raised some research needs which would be pertinent as well to a study of occupational achievement among black females. First, longitudinal data are needed in studies of occupational aspiration, so as to "provide information on the degree to which aspirations serve as the mediating link between background and achievement." Secondly, much more needs to be known about the persistence of motivational syndromes over time, as well as about "the degree to which the expressions of motivation at any given point in time may be influenced by contemporaneous situational circumstances as opposed to possibly enduring dispositions or orientations." Thus, for example, "to what extent is motivation contaminated by actual level of achievement?" Thirdly, "the study remains to be executed in which the long-run influence of parents' ambitions for their children can be assessed." Finally, "one fruitful avenue for future studies would be efforts applied to identifying those characteristics of adolescents (or of younger children or of older adults) which act as differential stimuli to the various sets and kinds of significant others who exert social influences at different critical stages of the socioeconomic life cycle."

Sewell and Hauser (1975) contributed to the measurement and understanding of socioeconomic achievement within the United States through a ten-year longitudinal study of males graduating from Wisconsin high schools in 1957. Although their subjects were restricted to Wisconsin, they believe that the basic socioeconomic achievement models they developed are nationally applicable, since there is relatively little variation in those processes throughout the United States. Sewell and Hauser (1975:182-183) were especially

> ...impressed with the complexity of the achievement process, with the large role played in that process by factors which vary randomly with respect to socioeconomic origins, and with the persistence over the early career of certain effects of socioeconomic background....
>
> The complexity of the process of socioeconomic achievement is reflected in the differentially persistent effects of parents' educational attainment, occupational status, and income on corresponding achievements of sons. All four components of socioeconomic background [i.e., father's and mother's educational attainment, father's occupational status, and parents' income] affect measured ability and post-secondary schooling. Net of measured ability, a year of father's or mother's education, $1000 in parents' average income, or 10 points of father's occupational status are each worth .04 to .08 years of son's schooling beyond high school. At the same time, even when socioeconomic background is well specified, a 10-point difference in measured mental ability is worth about .4 years in schooling, and less than one-fifth of the association between ability and schooling can be attributed to the mutual dependence of these variables on socioeconomic background.
>
> When we look at son's occupational status, there is a small effect of father's occupational status, even after the effects of ability and schooling have been taken into account....However, except for their effects via ability and schooling, none of the other three measures of socioeconomic background affects occupational status. As in the case of schooling, there are substantial effects of measured ability on occupational status, both directly

> and by way of schooling, and there is a very large effect of educational attainment on occupational status even after controlling socioeconomic background and ability.
>
> When we control ability, schooling, and occupational status, a dollar of parents' annual income (averaged over the years 1957-1960) is still worth more than 13 cents in son's earnings 8 to 10 years after high school graduation, but the effects on son's earnings of parents' education and father's occupational status are entirely indirect. Finally, each of the mediating variables: ability, schooling, and occupational status, enters the final equation for earnings, so none of their effects is wholly spurious.

Also of importance are Sewell and Hauser's (1975:183-185) comments regarding the appropriate view of the inheritance of socioeconomic position across generations, and the incompatability of the effects of socioeconomic origins on achievements in school and in the labor market with the nationally expressed goals of equal opportunity:

> ...it is fundamentally inaccurate to view the inheritance of socioeconomic position across generations in terms of the persistence of rankings on some global dimension of socioeconomic background or of social class. Rather, the persistence of social position across generations ought to be treated separately for each of the several dimensions of social inequality, and references to global constructs of social inequality ought to be recognized as having only summary or heuristic value. Moreover, our finding of the distinct mediating and direct effects of ability, schooling, and occupational status adds to the preponderance of evidence that factors of achievement as well as of social background enter importantly in the processes by which social goods are distributed in the United States. However sophisticated our nations about social origins, it is not possible to give an accounting of the distribution of education, occupation, and income in the United States that excludes individual achievement and ability....
>
> Finally, though the process of achievement is factorially complex and is subject to important components of luck or change, these facts in no way contradict our finding that there are important effects of socioeconomic origins on achievements in school and in the labor market, and these effects are not fully compatible with ex-

> pressed national goals of equal opportunity. We have already noted the extent to which socioeconomic background affects educational attainment, occupational status, and earnings, even when we control academic ability and intervening achievements. Moreover, we find that socioeconomic background accounts for significant components of the association of measured ability, schooling, and occupational status with each subsequent variable. For example, our findings suggest the naivete of efforts to measure the economic returns to education without controlling socioeconomic background and ability. Finally, except in the case of earnings (which are only affected by parents' income), every measure of socioeconomic background affects each measure of son's achievement. The fact that influences of socioeconomic background on educational attainment, occupational status, or earnings are partly mediated by measured ability or intervening achievements scarcely lessens their role in restricting opportunity.

In their investigation of the effects of the social psychological factors of high school rank, perceived expectations of significant others, and educational and occupational aspirations as intervening variables in the effects of socioeconomic origins and academic ability upon educational attainment, occupational status, and earnings, Sewell and Hauser (1975) found substantial support for the mediating role of the social psychological factors upon educational attainment. Less direct importance, however, was found for their role as mediating variables with respect to occupational status and earnings. Even here, however, they were not encouraged to ignore relationships between adolescent aspirations for achievement beyond schooling. Instead, they suggested that much more needs to be learned about economic and educational aspirations of youth, as well as about their perceptions of the extent of encouragement which is provided for them by significant others. This is, of course, similar to Duncan's, _et al._ (1972) concern about relationships between adolescent characteristics and responses from significant others.

Most important, perhaps, for our concerns about career options for black women are the indications of future research planned by Sewell and Hauser (1975:190-192). In addition to longitudinal follow-ups of their Wisconsin sample, which may be helpful in developing effective models to explain earnings, they plan to add such basic background data as that about race, ethnic identification, religion, and the size and structure of the family of orientation. They also plan to measure "the implications of social psychological variables such as job satisfaction and aspirations for the future," which, when coupled with previous data, "should shed further light on the role of motivations in socioeconomic achievement." Selected items of socioeconomic data about the siblings of the respondents will be collected. They will be helpful in estimating the total effects of family origins. They will also include females, which may aid them in coming up "with important evidence and interpretations of inequality of opportunity between the sexes as well as among persons of differing socioeconomic origins." Most crucially, their

> new field operations are intended to use concepts and measurement procedures that will be strictly comparable to those of the 1962 and 1973 national surveys of occupational and educational mobility in the United States (Blau and Duncan, 1967; Featherman and Hauser, 1974). We expect that the analysis of both state and national data will be complemented by the virtues of social psychological detail and of national representation within a common conceptual and procedural framework.

Duncan, et al. (1972), as well as Sewell and Hauser (1975), lead us to the interpretation that the process of socioeconomic achievement, including that of occupational achievement, is different for blacks and whites. We would also suspect that it is different for black males and females. Consequently, the overriding implication of their work for our purposes is the need for a careful measurement and assessment of the processes of socioeconomic achievement, with emphasis upon relationships between the family, the school, and work, among black women.

Other works are helpful in identifying some of the components of these processes. For example, Cramer, et al. (1966) studied almost 16,000 black and white high school students in the South. They found generally strong relationships between ability and socioeconomic background with respect to educational attainment, as measured largely by planning to attend college. They also determined that such factors as small sibship, presence of academically oriented siblings and friends, membership in a high-status friendship group at school (and having high status within such a group), and good student-teacher relationships were also positively related to planning for more education. Further, self-confidence and self-fate were related to more education in the expected directions. The establishment of controls for the extent of encouragement or support for college attendance from parents or parental surrogates washed out the differences by family intactness, a finding similar to that reported by Duncan, et al. (1972).

Cramer, et al. (1966:382-383) also offered some suggestions for reducing racial gaps in educational ambition:

> ...higher goals are most easily developed when economic security prevails in the home and when a positive orientation towards education occurs among those persons belonging to the adolescent's system of referents. Various on-going and proposed welfare measures promise more material benefits for those least well off in our society. It is to be hoped that all of these programs will soon be in full operation and that they will be successful.
>
> But it will require more personalized effort to insure that the reference systems of adolescents are conducive to high educational goals. The burden for this falls on...parents and...teachers.... it is not enough for most children to have friendly relations with their teachers. It is as important...for instruction to be challenging--not satisfied with effort below the capacity of the individual student--but also understanding and rewarding....the school environment is an important factor in determining the future plans of many youngsters....Certainly an increase in the size of faculties, with a concomitant reduction in the pupil/teacher ratio, would seem an essential measure needed to permit instructors to give more individualized attention to their students.

Although Suter and Miller (1973) failed to provide any analysis of the effects of race and sex upon the incomes of career women, they did conclude that greater consistency prevailed in the relationship between income and socioeconomic characteristics for women than for men, due primarily to the definitely smaller increments for equal step increases in their educational and occupational levels. Marital status appeared to be relatively unimportant. That is, if the occupational status and work experience of the female subjects were known, knowing their marital status did not add any predictive power to the income model.

Epstein's (1973) work about successful black professional women suffers from too many flaws to provide significant cues for the problems confronting native-born black women in the United States. Her sample of only 31 black women contained one-third who were not native-born. Many of her comparisons between black and white women are inadequate. One example of this inadequacy is" Although the white college-educated woman is strongly deterred from focus on a career when she marries (though she may work), the black woman who marries a black college-educated man cannot consider withdrawing from the marketplace" (Epstein, 1973:163, italics added). Epstein provided no empirical proof of the validity of her conclusion. There are, of course, some college-educated black women who have married college-educated black men whose husbands refused to permit them to work! Her global treatment of greater access to white society by black women than black men was also inappropriate, inasmuch as "white society" does not represent a single phenomenon. Finally, the majority of these women were in professional occupations where the probabilities of them having alternatives between salaried employment and self-employment were quite high.

Nevertheless, Epstein's (1973) work does provide some cues about types of factors promoting high occupational status among a small group of black women. These factors appeared to have included higher family backgrounds, and particularly so with respect to the presence of intact families and professional or semiprofessional mothers. Middle-class values were stressed in their homes. They had high levels of aspiration. Their confidence in their competences and abilities was high. Most had been educated, beginning with their elementary education, at white schools. Most made early career decisions to become professionals. Early decision-makers tended to have a decided advantage over late-choosers. Their parents' encouragement to enter the professions was significant, even when their teachers offered little or no encouragement, or tried to steer them into other areas. Epstein (1973:170-171) concluded that:

> The chance [for these black women] to become professionals developed out of a structure which narrowed their choices, made them visible and unique. For these few, the effects of living in a world otherwise beset with limits fed their determination and made them feel the only road to survival lay in occupational success. For those without the special support of family and personal networks of these women, and without their extraordinary ability to drive ahead, the limits of the occupational structure could only be defeating, even to those with ability. The self-maintaining mechanisms of the present stratification system within the professions clearly operate to keep the participation of certain persons low in spite of their possible intellectual contributions. Ironically for this small sample of black women, the effect of mechanisms within the larger stratification system (which operate to keep blacks and women down) served to reinforce their commitment to careers which would be normally closed to them, and by defining them as superunique, made it possible for some to rise within the professional structures. It has become clear that the elaborate filtering system which keeps elite spheres clear of alien groups is costly and self-defeating. It is rare that those who do push through emerge unscathed by the passage. Those who fall on the way are lost to the greater society. But the mechanisms which contribute to the status quo are often not consciously known even by those who participate in their exercise, and only by analyzing the various structural nexus in which they occur can they be isolated and evaluated for what they are.

Mednick and Puryear (1975) have provided some additional information about black female college students. THer 1971 data were obtained from 286 sophomore and senior students at five black colleges in several Southeastern and Middle Atlantic States. Most of their subjects had traditional perceptions of the roles of women. The characteristics of the major field of study and of the school attended were the best predictors of traditionality and innovation among the sample, while such intrapsychic explanatory factors as achievement motivation failed to account for any significant proportion of the variation between the sampled traditional and innovative females. The measures of parental background seemed to have had little effect upon the level of career aspirations of the students. Finally, they noted that fear of success was considerably lower among these black students than that typically reported for white students; and, perhaps a surprising finding, the traditional females were less militant than the innovative females. Innovative females, of course, were those majoring in fields generally containing an insignificant proportion of women.

Other data are emerging from recent studies funded by such agencies as the U. S. Department of Labor under the manpower research and development projects. Unfortunately, during the time when materials were being collected for this task (Summer, 1975), the dissertations listed below were not available for inspection. They are listed here with verbatim excerpts about their purposes from the Manpower Research and Development Projects, 1974 Edition, U. S. Department of Labor.

(1) An Analysis of the Determinants of the Labor Force Mobility of Females (Pamela J. Heath, University of Wisconsin):
"This research will investigate the relative strengths of economic, demographic, and attitudinal influences on the labor market decisions of women. The investigator is analyzing variations in family financial position, family structure and composition, costs of child care, and the individual's education and training, health, race, and work attitudes. (Longitudinal data are being used)

(2) An Analysis of Trends in the Relative Educational Attainment, Earnings, and Occupational Distribution of Women, 1900 to 1969 (Harriet Zellner, Columbia University):

> "This project analyzes changes from 1900 to 1969 in the educational attainment, earnings, and occupational distribution of women relative to men. Data classified by age, race, marital status, presence of children, and place of residence are being gathered from publications of government agencies and the National Industrial Conference Board."

(3) Careers of Upward Bound Alumni (Nancy S. Netting, Harvard University):

> "This study follows up a group of young people who have participated in Upward Bound--an intensive 3-year college preparatory program for disadvantaged students with 'undeveloped' college potential who enter the program as high school sophomores. The sample consists of 100 young people who completed at least 1 year in the program at the University of Hartford--60 who went on to college and 40 who dropped out of Upward Bound and may or may not be in school. The researcher will trace their job and educational histories in individual interviews in an attempt to (1) Isolate variables which have influenced their decisions during and since participation in Upward Bound; and (2) pinpoint characteristics which distinguish the students who went on to college from those who did not."

(4) The Effect of Federal Civil Rights Legislation on the Occupational Position of Minorities and the Structure of Occupational Discrimination (Andrea Harriet Beller):

> "This study appraises recent changes in the extent and structure of racial discrimination in employment in an effort to quantify the impact of public policy on the occupational status of blacks."

There were a number of other dissertations which may also have important implications for the problem at hand. They were not listed above, however, primarily because their data base years preceded the last several decades.

Findings are just beginning to emerge from the study entitled "Dual Careers: A Longitudinal Analysis of the Labor Market Experience of Women," which is being done by the Ohio State University's Center for Human Resource Research, for the U. S. Department of Labor. According to The Washington Post (22 April 1976), the five-year study, covering the years between 1967 and 1972, traced the labor market progression of 1,390 black and 3,693 non-black women, 30 to 44 years of age, over time. The results reconfirmed the proportionately higher contributions of black than white working wives to family income. Occupational achievement was also linked positively to educational achievement within and without the formal educational system, and to the extent of work experience. About one-third of the black and one-fourth of the white women in the study had health problems which affected the type and amount of their participation in the labor force. In addition, and without racial breakouts, the Post also noted that about one out of every six mothers of preschool children who were not in the labor force indicated that they would have been in the labor force if free daycare had been available for them. The study also concluded that the job behavior of these women was affected by their general feelings about social trends. An example was that liberated mothers were more likely to pursue careers and use non-relatives to care for their children. Only a small percent of these women had established careers, with established career patterns being most common among single women and least common among women with children.

Ford (1976) compiled a series of articles pertaining to minority-group relations in organizational settings. His primary objectives were those of providing background information about the adaptational and accomodative patterns of minorities to various organizational circumstances, and to further understanding about differential behaviors and job-related outcomes between whites and minorities. The major topics covered were racial attitudes and perceptions, effect of racial prejudice on behavior, minority leadership and competition, work values, work expectations, job satisfaction, integrating blacks into white organizations, employment programs for minorities, and testing and evaluation procedures.

Schmidt and Johnson (1976: 19-20), in an investigation of the effect of race on peer ratings in an industrial sample which was about 50 percent black, and which had experienced recent exposure to human relations training, found that "the racial bias effect in peer ratings does not inevitably occur and that an approximately equal proportion of minority and majority group members in peer groups and/or human relations training may be associated with its nonoccurrence." They believe that "the highly valid prediction device of peer ratings may be quite appropriate and useful in many integrated situations" (Schmidt and Johnson, 1976:20). Their suggestions for future research include the investigation of various factors which contribute to the elimination of the racial bias effect in peer ratings, such as those of the relative potency of human relations training and the percent of minorities within the peer group.

Harding and Hogrefe (1976:33), who investigated the prejudices of white collar workers in two Eastern department stores toward blacks in 1951, found that the extent to which equal status work contact between whites and blacks produced favorable changes of attitudes within the whites was dependent primarily upon the nature of the work situation and the type of the measured attitude. In their department store setting, "equal status work contact produced a large increase in willingness to work with Negroes on an equal basis, but no significant change in willingness to accept other relationships with them."

The most valuable finding for our purposes from Lefcourt and Ladwig (1976: 47) is

> that prestige suggestions need to be related to goals towards which subjects have some expectancy of success. A second implication is that Negroes may become more task and achievement oriented when they expect that their behavior can determine the occurrence of reinforcements which are of high value to them. The fact that Negroes have usually performed less adequately than whites on intelligence measures may reflect the fact that middle-class goals which require extensive schooling are customarily unavailable to them. Consequently, such goals may accrue a negative reinforcement value as well as low expectancies of success for Negroes. With gradual changes in Negroes' opportunities for upward mobility it is possible that Negroes will come to expect and value middle-class goals and consequently display more achievement behavior.

Beatty (1973) was very concerned about the development and use of appropriate criteria for evaluating minority workers, and, in his research, specifically that of supervisors. He was also concerned about the paucity of adequate research about minority employment which could aid the designing of training programs, although considerably large amounts of public and private funds have been expended upon training programs. He emphasized the ambiguity and subjectivity characteristic of performance evaluation, and called for greater clarity and objectivity in performance evaluation.

The exploratory work of Goodale (1976) about the work values of hardcore individuals in training programs sponsored by the National Alliance of Businessmen is particularly important in that he was concerned with changes in work values which occurred as a function of the training orientation programs. He felt that a developmental study of work values was needed to help unravel the relationships between background factors and work values:

> ...longidtudinal studies that trace work values developing in children of various socioeconomic classes are needed to identify the time at which the value systems diverge and to suggest determinants of different sets of work values. Until developmental research is done, studies of work values and background information will be more descriptive than explanatory (Goodale, 1976:131).

He also made some recommendations for training programs. Attempts could be made to modify specific work values in the direction of making the trainees more favorably disposed to good work values. Training should be tailored to meet individual needs. Sequential progression through programs should be made available, as opposed to having to remain in training programs for a fixed amount of time.

Milutinovich (1976) was concerned with job-satisfaction differences among blacks and whites in three organizations. His study was prompted in part by the paucity of studies which had concentrated upon relationships between race and job satisfaction. His results led him to emphasize the tremendous complexity of the relationships between race and job attitudes, and the fallacy of stereotyping broadly racial differences. He did find some job satisfaction differences between black and white workers, which could, perhaps, be explained by differences in referential approaches to jobs by blacks and whites. Thus, Milutinovich (1976) sees the need for further investigations of racial effects upon job satisfaction which will consider the intervening variables of occupational level, age, tenure, sex, community, organizational characteristics, and job level. In addition, the specific determinants of job satisfaction must be included.

Also of importance are some findings related to black females sampled by Milutinovich (1976). In general, total job satisfaction of the black blue-collar workers was significantly greater than than among their white counterparts, while total job satisfaction of black white-collar workers, in comparison with white white-collar workers, showed the reverse pattern. However, among blue-collar workers, "Black female workers were less satisfied with work, supervision, and co-workers than their white female counterparts ....Black females were also less satisfied than black males with the same job aspects. Thus, black, female blue-collar workers were the least satisfied group of workers with respect to work, supervision, and co-workers compared with black male or white female counterparts" (Milutinovich, 1976:145). Further, among white-collar workers, black females "were the least satisfied with supervision" (Milutinovich, 1976:146).

Feldman (1976) and Greenhaus and Gavin (1976) also reached conclusions about racial effects upon job satisfaction which underscore inconclusiveness of research findings in this area. Their work also suggests the need to investigate more carefully the types of intervening variables suggested by Milutinovich (1976). The Greenhaus and Gavin (1976) findings contradict those of Lefcourt and Ladwig (1976) in that one finding of interest in the former study

> ...was the relationship between ethnic group and effort-reward expectancy. Blacks...perceived a greater connection between hard work and attaining work rewards than did whites. Although only two of the differences were significant, they were consistently in the same direction. This would seem to suggest that blacks in this study did not feel the relative powerlessness and external control indicated by prior research (Lefcourt and Ladwig, 1965). /Greenhaus and Gavin, 1976:169/.

Heneman and Murphy (1976), who were primarily concerned with the correlates of absenteeism among the four race-sex groups of black and white females and males who were hourly wage earners in a Southern consumer goods manufacturing firm, found no significant absenteeism by race, but females were significantly higher on absenteeism than were males. Age-absenteeism and tenure-absenteeism relationships were not significantly moderated by race, nor by sex. However, the skill level-absenteeism relationship was significantly moderated by race and sex, due largely to the highly positive correlation between skill level and absenteeism for the black females. The group size absenteeism relationship was also affected by race and sex, significantly positive for white females, and significantly negative for black females and white males. Although the authors could not identify the precise cause of the latter finding, they speculated that it was "probably reflective of systematic differences" between the two subgroups of black females and white males and the white female group "in personal and/or job characteristics associated with group size and thus absenteeism" (Heneman and Murphy, 1976:191).

Champagne and King (1976) were concerned with job satisfaction among 513 underprivileged adults in a federally supported job retraining program in South Carolina. Primarily concerned with demonstrating that job satisfaction factors formed a hierarchy among disadvantaged workers, and that simple scaling procedures could be used to define that hierarchy, they determined that the sample generally ranked intrinsic factors of duty and satisfaction with a job higher than they did extrinsic factors, such as those of pay, praise, and respect. A racial breakout of the sample revealed some differences. In descending order of rank importance, the blacks selected the motivational variable of "Duty to do one's best" first, followed by working conditions, personal satisfaction, steady work, fair boss, providing that one can do the job, liking the job, praise from boss, et cetera. The black and white choices in the first rank order were the same, but, for the whites, second was personal satisfaction, followed by liking the job, working conditions, steady work, fair boss, fair company, proving that one can do the job, chance for a promotion, et cetera. The authors also provided comparisons by sex. The first three variables listed by both sex groups, and in the same order were duty to do one's best, personal satisfaction, and working conditions. Unfortunately, no race-sex analysis of the data were provided.

But Ash (1976) did compare job satisfaction among black, white, and Spanish-surname female production and clerical employees, using a Science Research Associates employee attitude survey for one group, and a Job Description Index for the second. His primary concern was the effects of racial or ethnic group membership upon job satisfaction and worker morale. He noted the extreme paucity of such studies, as well as the general fragmentation and inconclusiveness of that existing literature. His findings generally supported previous studies showing less job satisfaction among minority than among majority workers. He noted that:

> The reasons for this difference have not yet been pinned down, however. On the one hand, it might be argued that minority-group workers would have a frame of reference based on discrimintion experienced that would lead them to expect less from their jobs. Hence, they ought to be more satisfied than majority-group whites. Almost all research results run counter to this hypothesis, however. The alternative hypotheses are that these persisting differences reflect either negative effects of continued experiences of a discriminatory nature from either fellow employees or supervisors or both, or that minority-group employees come to work with a set of expectations different from those of whites, which are not as well-fulfilled as the expectations of white employees, or that both of these phenomena occur. Further research should be directed toward more accurately pinpointing the reasons for lower job satisfaction among minority-group workers than among majority-group employees, and policies and programs should be devised to reduce this differential. It would be quixotic to hope that any set of prescriptions could eliminate job dissatisfaction altogether (Ash, 1976:215).

Triandis and Malpass (1976) examined considerable literature which reenforced their conclusion about racial differences in the perception of the social environment. They suggested the need for research on the antecedents of these genuine differences. They also believed that training could be effective in reducing interracial conflict in employment settings. The three major potential targets they identified for training were (1) the economically disadvantaged, (2) the members of the employee's social environment (e.g., foremen, fellow workers), and (3) human relations or race relations trainers, whose primary function would be amelioration of employment problems. Each of these three groups would require different types of training, although certain types of training would be common to all three groups.

Although several of the selections in Ford (1976) focused upon problems related to tests and test validity, Schmidt, Berner, and Hunter (1976) provide us with the best suggestions for consideration in the case of increased career options for black women. They regard test fairness and validity differences as two distinctly different phenomena. A careful analysis of 19 studies which reported employment test validities by race led them to conclude that:

> ...when the extrinsic factors are controlled, ratings, rankings, and other subjective criteria are no more likely to generate instances of single-group validity than are more objective criterion measures, and neither kind of criterion measure is associated with frequencies of single-group validity higher than would be expected on the basis of chance alone.
>
> A conservative interpretation of these findings is that they cast serious doubt on the existence of single-group validity as a substantive phenomenon. The close fit of the null model likewise indicates that differential validity--which is much less frequently reported in the literature--is probably illusory in nature. Psychologists concerned with the applicability of employment tests to minority groups should probably direct their future efforts to the study and determination of test fairness rather than to the pseudoproblem of subgroup differences in validity coefficients (Schmidt, et al., 1976:342-344).

Finally, this section would be incomplete without reference to the well-known findings obtained by Jencks (1972). He documented the unequal distributions of educational opportunities, cognitive skills, educational credentials, occupational status, income, and job satisfaction within the American society. He also noted his general lack of success, as well as that of others, in explaining most of these inequalities. His findings about relationships between family background, schooling, and work are in accord with those of Blau and Duncan (1967) and their fellow social stratificationists. That is, family background is only a partial determinant of educational attainment, which, in turn, is also only a partial determinant of occupational achievement. Thus, family background has only a moderate impact upon occupational achievement.

Jencks (1972:255) is quite convinced that "equalizing educational opportunity would do very little to make adults more equal." Jencks (1972:256) is also in agreement with Coleman (1966), in that "the character of a school's output depends largely on a single input, namely the characteristics of the entering children. Everything else--the school budget, its policies, the characteristics of the teachers--is either secondary or completely irrelevant." Jencks does not favor the use of coercion to maintain reluctant students in school. Further, with respect to the problems of reducing inequities, he argues that:

> For social reformers whose primary concern is adult inequality, our findings have more negative than positive implications. We have shown, for example, that different varieties of inequality are very loosely related to one another. This means that no single general strategy will eliminate all sorts of inequality. Instead, there must be a variety of specific strategies for deal-

> ing with specific kinds of inequality. Furthermore, since reducing inequality in one area has very limited effects on inequality in other areas, it is important to set priorities (Jencks, 1972: 261).

The topmost priority set by Jencks, of course, was that of income. Income inequities can best be reduced through a direct approach:

> Most explanations of economic inequality emphasize the fact that some people are more competent than others. They also tend to assume that competence depends to a significant extent on an individual's upbringing, his schooling, and his cognitive skills. The evidence we have examined shows that neither family background, schooling, nor cognitive skill explains much of the variation in men's incomes. This seems to imply that family background, schooling, and test scores do not explain much of the variation in men's vocational competence. An alternative theory, however, is that competence does not explain much of the variation in income. We suspect that both statements are partly true. If so, equalizing competence remains important, even though none of the obvious devices for doing so looks very promising.
>
> We have argued that the best way to equalize competence is to make this an explicit objective of social policy and to encourage employers to reorganize work with this objective in mind. Job development and job rotation could probably help equalize some varieties of competence. Nonetheless, kibbutz experience suggests that some disparities will also persist, even in a society that deliberately tries to reduce them.
>
> If we want to equalize the distribution of income, then, we need a more direct approach. We explored a variety of mechanisms for doing this, ranging from progressive taxation and income maintenance to direct government regulation of wages or tax incentives to employers for equalizing wages. We argued for concentrating on the distribution of initial wages, on the ground that this was most likely to be politically acceptable over the long run....
>
> In America, as elsewhere, the general trend over the past 200 years has been toward equality. In the economic realm, however, the contribution of public policy to this drift has been slight. As long as egalitarians assume that public policy cannot contribute to economic equality directly but must proceed by ingenious manipulations of marginal institutions like the schools, progress will remain glacial. If we want to move beyond this tradition,

> we will have to establish political control over the economic institutions that shape our society. This is what other countries usually call socialism. Anything less will end in the same disappointment as the reforms of the 1960s (Jencks, 1972: 263-265).

CRITICAL CONCERNS

What, then, are the critical concerns about the relationships between career options for black women and the Education and Work Section of the National Institute of Education?

The foremost concern is whether or not the Education and Work Section of the National Institute of Education can play a role in improving career options for black women.

Assuming that there is a role which could by played by the Education and Work Section, the second concern is about the type of direct and indirect role which should and could be played by that Section.

Assuming that appropriate roles were determined, and effective role performance were to occur on the part of the Education and Work Section, the third concern is an assessment of the real impact of those role outcomes upon the career options of black women. In short, can the Education and Work Section make a difference in the prevailing patterns of career options for black women?

A review of the foregoing materials suggests that the Education and Work Section of the National Institute of Education can play an indirect role in impacting career options for black women. The most important role which could be played lies in the area of conducting competent research about the relationships between family background, schooling, work, and income for specific black female subgroups over time. Sufficient comparisons should be made between the derived models for black females, and those which exist or may be developed for other race-sex groups, including black and white males, and white females. The identification of major barriers to career successes for black female subgroups is important, as is the development of remedies directed at barrier removals.

The review of the materials does not suggest that the Education and Work Section can play a significant role in the development of curriculum materials at this time, inasmuch as insufficient information about the relationships between those variables, or the effects of curriculum resources upon career options for black women, is available.

The review of the materials also suggest that the Education and Work Section could launch a careful investigation of various training programs, including those within secondary schools, so as to measure their successes and failures, as they relate to initial labor force entry or reentry for black women. The continuation of demonstration projects, however, should await the development of more valid and reliable evaluation studies.

Finally, the review of the materials suggested that there are critical differences in the patterns of obtaining and maintaining career options for specific race-sex groups, but the precise differences are not known. That is, it is known, for example, that race and sex make a difference, but the specific pattern of the difference remains unknown. One of the major reasons why those specific differences remain unknown is due to the tendency in the literature, and within specific training programs, to treat black females as a homogeneous group.

Consequently, for a variety of reasons, one cannot provide definitive answers to the types of questions posed by Kelly with respect to factors motivating the participation of non-participation of black women in the labor force, the effects of awareness upon such participation, and the like. Our review of the materials available, however, has supported Kelly's belief that the National Institute of Education could play a more positive role in improving career options for black women, namely, to repeat, by providing relevant research upon this subject.

In conclusion, then, it is clear that career options for black women have generally been more constricted and restricted than those of black men, white men, and white women. It is also true that the usual relationships between education, occupation, and income prevail among black women, in that those with more education are more likely to obtain jobs (and better jobs), and higher earnings. A wide range of individual and environmental variables affect career participation, but significantly more research must be undertaken to determine the combinations of those variables and the resulting effects upon black women. Highly questionable is the extent to which such factors as motherhood cause reduced career options. That is, the literature generally treats early pregnancies and illegitimate children as the cause of reduced educational and economic opportunities and results among many black women, but an alternative would be to treat them as intervening variables, while treating the situational responses/societal resources as the causal variables for specific outcomes. Much more attention needs to be given, as well, to the career rewards for black women, and the impacts of upgrading those rewards, as through increased income, upon further improvements in career options for them now and their counterparts in the future.

CHAPTER SEVEN

RECOMMENDATIONS

This chapter sets forth recommendations related to education and work, for consideration by the Education and Work Section of the National Institute of Education. The recommendations focus largely upon the major concerns and strategies of the Education and Work Section as they may relate to black women.

RECOMMENDATION 1. The Education and Work Section of the National Institute of Education should develop a specific component devoted to black females.

RECOMMENDATION 2. The major goal of the specific black female component should be that of an increase in the knowledge and understanding of the relationships between family background, schooling, work, and income among black females. Secondary goals should include the identification of differences between the resulting family background to schooling to work to income models of achievement for black females, black males, white males, and white females. The crucial and specific barriers imposed by racial and sexual discrimination upon career options for black women should be identified, and remedies for reducing those barriers should be developed and implemented.

RECOMMENDATION 3. Therefore, the first and primary strategy of the Education and Work Section, Black Female Component should be that of supporting a major, large-scale, national research study of the relationships between family background, schooling, work, and income among specific subsets of black females over time. The study design should include research about relationships between relevant sociocultural, psychological, and physiological variables, such as those of determinants of job satisfaction, and of health status. The study should also focus upon the impact of federal legislation mandating equal educational and employment opportunities upon black women.

RECOMMENDATION 3A. This should be a comprehensive study involving the most qualified investigators. Investigators should not be selected solely upon the basis of ascribed traits. They must be selected on the basis of achieved characteristics.

RECOMMENDATION 3B. Specific and sufficient monies to carry out this massive study should be sought through a special Congressional Act, which should also, where necessary, mandate the cooperation of various Federal agencies, including the United States Bureau of the Census, in accordance with prevailing regulations about privacy of information.

RECOMMENDATION 4. The Education and Work Section should not proceed to develop various strategies which relate to improved career options for black women until sufficient data are at hand to guide and direct the types of strategies which will be most effective in promoting those career options for black women. This means that the existing guidance, counseling, and placement programs, as well as those which will come into existence through the efforts of other public and private agencies or organizations will not be diminished or otherwise affected by the National Institute of Education, but that the National Institute of Education itself will await relevant data before adding to the complexity of existing such programs. A similar rationale would govern the design, development, testing, and disseminating of career education curriculum materials.

RECOMMENDATION 5. The Education and Work Section of the National Institute of Education should launch longitudinal studies of traditional and alternative educational settings serving different Career Education needs so as to aid in the determination of the types of such settings which are most likely to promote effective use of career options by specific subsets of black females, as well as some determination of the types of racial and sexual trainee and faculty mixes which seem to be most appropriate under varying settings.

RECOMMENDATION 6. The Education and Work Section of the National Institute of Education should examine existing models of the delivery of financial assistance to black females in educational settings and determine the need, if any, for modifications within those delivery systems. Of especial interest would be the examination of the effects of loans to college students upon their career choices, their locations for career training, their subsequent levels of educational attainment, and their subsequent career placements. Of further interest is the effect of the recipient of financial assistance (i.e., the student, the parents in the case of minor children or children who have not yet completed postsecondary education, or the schools) upon the achievement and motivational interest of the students.

RECOMMENDATION 6. The Education and Work Section of the National Institute of Education should launch a special study of the relationships between early pregnancies and the presence of illegitimate children upon the career options for affected black women. In addition, a demonstration component should be included which would test out the effects of social intervention designed to further educational and occupational attainment among those affected women who wish to seek active participation within the labor force.

The overall model underlying the above recommendations is that the educational, occupational, and income achievement levels of black women are less affected by family background than by opportunities for adequately rewarded participation within the world of education and the world of work. While innumerable theories abound about the relationships between family background, schooling, work, and income among black women, the available data are too sparse, too fragmented, and too inconclusive to permit valid generalizations or modeling relevant to the heterogeneous group of black women. Therefore, the most noteworthy contribution which could first be made by the National Institute of Education is the support of a comprehensive research study isolating the causal and correlational relationships between relevant variables. The findings could then be used to generate effective development of policies and programs to improve the career options of black women. National policies and programs will probably be most effective in promoting improved career options for black women within the various States of the United States.

In conclusion, the inferences which were derived from statistical data which permitted some determination of the probable effects of recent Federal policies and programs upon the career options for black women indicated that those policies and programs generally had insignificant, weak, or moderate impacts upon them. Unfortunately, the results are quite mixed, and it is almost impossible to disentangle various policy and program effects or impacts. Further, the survey of related data tended to confirm the general paucity of empirical data about the relationships between family, schooling, work, and income for black women, thereby leading to the overriding recommendation for a massive research undertaking of this type.

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APPENDIX A

AN INDIVIDUAL SUCCESS STORY

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AN INDIVIDUAL SUCCESS STORY

(The following story of an individual success by a black woman with respect to upward mobility was taken in the entirety from a profile in the Durham (North Carolina) Morning Herald, 22 February 1976).

"Mae McLendon wanted to droup out of Chapel Hill High School one time and join the Youth Corps.

"But a worker with the federally funded program wouldn't let her.

"'The lady told me to go back to school,' Miss McLendon laughed. 'That turned out to be good advice.'

"With the support of her family and friends, and with her own almost boundless energy, she not only finished high school, she also went on to further studies, and accomplished some other things along the way.

"Mae Belle McLendon was born Aug. 6, 1950, in Red Springs. Her father, William Amos McLendon, a construction laborer, died two years later. Her mother, Martha McLendon, supported the family by doing field work in the summer and domestic work in the winter.

"From the beginning in the rural poverty of Robeson County, Miss McLendon has risen to hold seats on the Orange County Board of Social Services and the policy-making state Democratic Party Executive Committee.

"She was named Outstanding Student twice during her years at the University of North Carolina at Chapel Hill and is a member of both the Valkyries, the women's honor society, and the Order of the Golden Fleece, the honor group for all students.

"In addition to working since May 1974 at the Research Trinagle Institute, Miss McLendon is within a year of completing her master's degree in social work at UNC.

"She remembers how hard her mother worked in Red Springs when she was small. 'When I was growing up I didn't consider myself poor, but I was,' she said. 'At least on a farm you get good food.'

"But Miss McLendon doesn't have too many food memories of the opportunities for young black people in Robeson County. 'I went to Red Springs Colored High School. They finally changed the name, thank God. I was glad.'

"Mrs. McLendon, her mother, said she wishes they'd moved to Chapel Hill earlier than 1964, when they came to join Mrs. McLendon's two other daughters. Hattie G. Miles, a nurse at N. C. Memorial Hospital, and Helen Galbreath, a lab assistant in the School of Medicine, are older than Miss McLendon and had lived in Chapel Hill for some time before 1964.

"'I have really been proud of her,' Mrs. McLendon said of her youngest daughter. 'Before we moved it was hard on all of us. She has really worked. She has had a job since she was first old enough.'

"They have lived in the same four-room cinderblock house at 108 Cole St. since they moved to Chapel Hill. A large garden behind the house provides vegetables the family eats year round.

"Besides her mother, Miss McLendon shares the house with her 8-year old daughter, Anissa Carol McLendon, who was born while Miss McLendon was in high school. Anissa is a third grader at Frank Porter Graham Elementary School.

"The pregnancy when she was 16 years old changed Miss McLendon. 'I had to adjust. I realized that I was no longer a child,' she said. She left school in January 1967; Anissa was born in May and she returned to high school in September.

"The family is a close one, and concern for Anissa's future is one reason Miss McLendon decided to go to college and become a professional social worker. Her mother has cared for Anissa, while the unmarried Miss McLendon has gone to school.

"Anissa is close to her father and his relatives, who live nearby. 'After all, they're her family too,' Miss McLendon said.

"While describing herself as a 'book worm' and 'a history nut,' Miss McLendon gives a lot of the credit for her continuing her education to encouragement from social workers and community friends and especially to her involvement in the Upward Bound program.

"She was a part of the first year of Upward Bound on the Carolina campus in 1966. The federally funded project is designed to help high school students from poor families or with inadequate high school preparation to develop skills that would help them in postsecondary education.

"Her involvement with Upward Bound has continued over the years. 'I've served in just about every job except director,' she said. Her jobs have included female residence counselor, in which she supervised seven other counselors and 50 high school students, clerk-typist, assistant to the associate director and aide.

"Miss McLendon also has served as coordinator of the Mary Gilson Tutorial Program sponsored by the UNC Black Student Movement, of which she was an active member.

"Miss McLendon was a member of the Chancellor's Committee on the Status of Minority and Disadvantaged Students at UNC in 1971-72.

"From 1974 to 1975 she was a member of the graduate student honor court and the graduate student senate. She also was cochairman of the second year class at the School of Social Work.

"She is a member of the Orange County Young Democrats Club and was a member for four years of the Chapel Hill Human Relations Commission.

"Other activities include the National Association of Social Workers, the Triangle Association of Black Social Workers and the Women's Political Caucus.

"'You know, I don't even know how many organizations I belong to,' she laughed.

"Her work at the Research Triangle Institute was recently reduced from fulltime to parttime so she could do her master's degree field work with the Chapel Hill Department of Human Services. She works there three days a week and at RTI two days.

"Her job at RTI includes library research, review of professional literature on vocational education and women and minorities in science and technology, and writing sections of a final report to the U. S. Office of Education on the Upward Bound project. She also is involved in a field test of a questionnaire for a national study on dropouts.

"The choice of a career in social work seems appropriate for Miss McLendon, who expresses concern for people around her.

"'My experience with social workers had been good, so I thought maybe I could do as good,' she said mischievously. Then her face became serious.

"'I want to go back into my community to give back some of what I've been given.

"When the Orange County commissioners appointed Miss McLendon in July to the county social services board, a five-month fight began about her eligibility.

"The question arose because of a state Social Services Commission rule that a person was disqualified from serving if a near relative received aid through the county welfare department.

"Miss McLendon's mother gets Medicaid and Supplemental Security Income through the Orange County department.

"Miss McLendon was seated on the county board in December, but it took complicated legal arguments, two attorney general's opinions and a repeal of the controversial rule by the state Social Services Commission.

"'I think my kind of input is necessary,' she said. 'We need the viewpoints of a person who's providing the service and a person who's receiving it. We then need the feedback so we can know what's happening.

"'I'm not against having a recipient on there, even though it makes some people's hair rise. One person can't change the vote. I never could see what got people so upset.

"Her involvement in the Democratic party began in 1968 and accelerated in 1969 with Howard N. Lee's first successful campaign for Chapel Hill mayor. She has worked in all his campaigns and plans to help with this year's try for Lieutenant governor.

"Miss McLendon has attended every level of Democratic convention except the national one and has been a precinct officer for five or six years.

"When she was elected one of five Orange County members of the state executive committee in 1972, she was the youngest person in that group. Her second two-year term expires this year, and she hasn't yet decided whether to seek another term.

"She also hasn't decided on who to back in the crowded presidential field, although she rules out any support of Alabama Gov. George C. Wallace.

"'I could rank them all one through 10, but they'd all be No. 10,' she said.

"But although she doesn't agree with Wallace's philosophy, Miss McLendon becomes enraged at senseless violence such as the assault that crippled Wallace in 1972.

"'People have got to fight for what they gelieve in but respect others for fighting for their beliefs. Take Wallace,' she said. "I wouldn't support him, but he's got a right to work for his beliefs without being shot.'

"Most of her efforts are directed at helping people who might have more going against them than for them. And her interest in history is apparent when she urges people to reflect during the Bicentennial year 'on our history and how far we haven't come.'

"'This is a melting pot only for some. For the American dream to come true, everybody has to fight for it. We're a long way from not looking at the color of someone's skin or his sex.'

"She said one reason for her involvement in social work and politics was to 'show people that racism still exists.' Racist practices are more serious to her than sexist ones, she said.

"'There's an illusion of liberal Chapel Hill. Let me tell you, there's racism here too.'

"Miss McLendon's work at RTI and the Department of Human Services with clients and community organizations, when added to the beginning political season, leaves her little time for herself.

"She said her life has calmed down some since what she described as her 'militant phase' in her undergraduate days at UNC, but her responsibilities have increased.

"She relaxes by listening to music in her bedroom, attending sports events and concerts with a few friends and reading. Soon she will begin studying long hours for her comprehensive exams for the master's program, which are given in April. She also likes to spend as much time as she can with her daughter.

"Her work, both to earn money to help support the family and to help improve the circumstances of other people, can make Miss McLendon reflective.

"'At first I thought I was out to save the world, and I have to realize that I can't. Sometimes I get so hopeless, but I guess everyone gets frustrated.

"'I feel I can talk about this country because I'm out there working to change it. I get so mad at people who don't work and then gripe. They could change things that are wrong.' And then she added, 'I have to believe that.'

"But her smile returned, and she said her long-range ambition is to marry a millionaire and take a long vacation.

"'No, really I want to work with people and community organizing. I'd like to work in North Carolina, in Orange County, in Chapel Hill,' she laughed.

"'I feel secure here. I'm from a small town. Seeing Chapel Hill grow was bad enough, but I wouldn't mind working away for a year or so.

"'I want to work and get some money because you can't help poor people when you're poor yourself.'"

APPENDIX B

TABLE 19

1974-1975 Predictions of Training & Other Qualifications & Employment Outlooks for Selected Occupations

Table 19.

1974-1975 Predictions of Training and Other Qualifications and Employment Outlooks for Selected Occupations*

OCCUPATION	QUALIFICATIONS **	EMPLOYMENT OUTLOOK ***
INDUSTRIAL PRODUCTION & RELATED OCCUPATIONS		
FOUNDRY OCCUPATIONS (produce metal castings)		
Patternmakers	Apprenticeship; high school education; manual dexterity; three dimensional visual acuity.	Largely replacement
Molders	Apprenticeship; eighth grade education critical, high school desirable; manual dexterity; good vision; good physical stamina, considerable standing required.	Largely replacement
Coremakers	Apprenticeship; eighth grade education mandatory, high school desirable; manual dexterity for some types; light coremaking not strenuous physically.	Largely replacement
MACHINING OCCUPATIONS (produce products by using machines)		
All-Round Machinist	Apprenticeship, training programs, or on-the-job training; high school or vocational school training (mathematics, physics, or machine shop training are desirable); requires concentration and accuracy, ability to work independently.	Moderate increase
Instrument Makers (Mechanical)	Apprenticeship, occasionally advancement from lower-level positions; generally high school graduates who took algebra, geometry, trigonometry, science, and machine shop work; strong interest in mechanical ability; above average manual dexterity; resourceful, reliable, capable of independent work, strong in cognitive relationships and interpretation; very conscientious and creative.	Moderate increase, but very few openings

OCCUPATION	QUALIFICATIONS **	EMPLOYMENT OUTLOOK***
Machine Tool Operators	Generally on-the-job training, occasional formal training by employers; prior mathematics and blueprint reading courses helpful; mechanical aptitude, some experience in working with machines helpful; physical stamina required (much standing); capacity for independent work, engaging in tedious work.	Moderate increase
Setup Men (Machine Tools)	All-round machinist; above average in communicative and supervisory skills.	Rapid increase
Tool and Die Makers	Apprenticeship or on-the-job training; high school or trade school education preferable, with good working knowledge of mathematics and physics; considerable mechanical ability, finger dexterity, aptitude for precise work; sometimes must demonstrate mechanical and mathematical aptitudes through tests.	Slow increase
PRINTING OCCUPATIONS		
Bookbinders & Related Workers	Apprenticeship, including on-the-job training; usually a high school education; mechanical aptitude; at least 18 years old.	Moderate increase
Composing Room Occupations	Apprenticeship, high school graduate, good physical condition; training in English (especially spelling) and mathematics; printing and typing courses earlier useful, as are general interest in electronics, in photography, or artistic ability.	Slow decrease, but slight replacement needs

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
LITHOGRAPHIC OCCUPATIONS (offset printing)	Usually apprenticeship, emphasizing special skills; good physical condition; high school graduate; at least 18 years old; high school and vocational school training in photography, mathematics, chemistry, physicis, and art are helpful; aptitude tests sometimes given by prospective employers.	Rapid increase
Photoengravers	Generally same as above, with emphasis on background courses in chemistry and physics, physical examination often required; strong visual acuity and good color discrimination.	Slow decline, with extrem ly slight replacement ne
PRINTING PRESSMEN AND ASSISTANTS	Generally apprenticeship, occasional on-the-job training; applicants often selected from lower-level employees; high school education or its equivalent generally required, with chemistry and physics being helpful; good mechanical aptitude is important, as are good color visualization, physical strength and endurance.	Slow increase
OTHER INDUSTRIAL PRODUCTION AND RELATED OCCUPATIONS	Generally physically fit, dependable persons with some aptitude for mechanical work; high school education preferable, but not mandatory; generally able to work well at relatively fast clip.	Slow increase, high repla ment needs
Automobile Painters	Largely informal on-the-job training; good health; keen eyesight; good color sense; a steady hand. High school graduate advantageous.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
Automobile Upholsterers	Generally on-the-job training; mechanical inclination; good physical condition; enjoyment of creative work with hands; mathematics courses, high school education are helpful.	Slow increase
Blacksmiths	Generally apprenticeship; good physical condition; vocational school or high school courses in metalworking, blueprint reading, and mathematics helpful.	Slow decline: few replacements
Boilermaking Occupations	Apprenticeship; good physical health and stamina; high school graduates with courses in mathematics, blueprint reading, and shopwork preferable; above average mechanical aptitude and manual dexterity.	Moderate increase
Electroplaters	Apprenticeship; high school or vocational school training in chemistry, electricity, physics, mathematics, and blueprint reading helpful.	Moderate increase, replacement good
Foremen	Knowledge and experience, as well as supervisory skills, essential; movement through the ranks, but increasingly college education becoming important, especially with backgrounds in business administration, industrial relations, mathematics, engineering, or science; on-the-job training also necessary.	Moderate increase, replace-
Forge Shop Occupations	Apprenticeship; high school education preferable (more skilled jobs, high school education is needed, along with courses in mathematics, especially geometry, drafting, and shopwork.	Slow increase, some peridic lay-offs anticipated

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Furniture Upholsters	On-the-job training; good manual dexterity; good color sense, eye for detail, creativity; occasional heavy lifting. High school or vocational training in chair caning, furniture making, textile fabrics, and upholstery repair very helpful.	Slow increase. replacement outlook good
Inspectors (Manufacturing)	Brief on-the-job training; generally experienced production workers preferred; good health, good eyesight, ability to concentrate on details, and follow directions. Good human relations skills.	Moderate increase, and replacement outlook good
Millwrights	On-the-job training or apprenticeships on formal basis; Generally high school applicants between 18 and 26 years of age, with prior courses in science, mathematics, mechanical drawing, and machine shop practice being extremely useful.	Moderate increase
Motion Picture Projectionists	Union apprenticeship program generally, although some on-the-job upgrading training possible, such as upward mobility from ushering; high school graduates preferred; examination required for union membership.	Slow increase, largely replacement
Photographic Laboratory Occupations	Generally informal on-the-job training; high school education preferable for darkroom technicians, with courses in chemistry and mathematics helpful; more advanced or higher level positions generally require college education, particularly on supervisory or managerial levels.	Rapid increase
Power Truck Operators	On-the-job training (very short periods required); physical examination usually; good health, above average eyesight, manual dexterity, mechanical ability	Moderate increase
Production Painters	On-the-job training (short period); high school graduation not generally required; steady head, good eyesight, standing required, so good physical condition.	Slow increase, mainly replacement

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
Stationary Engineers	Formal apprenticeships or formal on-the-job training; preferably high school or trade school graduates between 18 and 25 years of age, with training in mathematics, mechanical drawing, machine-shop practice, physics, and chemistry; good physical condition, mechanical aptitude, and manual dexterity.	Largely replacement
Stationary Firemen	Usually can get experience and knowledge to pass license examination by working as helper in a boiler room; normal vision and good hearing needed, as well as understanding of operation of the machinery.	Slow decrease, largely replacement
Wastewater Treatment Plant Operators	Generally high school education or equivalent; but changing technological conditions pointing toward technical-vocational school or junior college training; examinations generally required, including testing of elementary mathematics, mechanical aptitude, general intelligence, physical agility; some on-the-job training or formal education in relevant areas.	Rapid increase
Welders and Flame Cutters	Depending upon type of equipment, et cetera, to be used, generally short period of on-the-job training, to somewhat longer periods, with some apprenticeship in some areas. High school or vocational school training in welding preferable, with courses in mathematics, mechanical drawing, and blueprint reading helpful. Requires manual dexterity, good eyesight, good eye-hand coordination, ability to concentrate on detailed work for long periods, free of physical disabilities preventing bending, stooping, working in awkward positions.	Rapid increase

OCCUPATIONS	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
CLERICAL OCCUPATIONS	Generally at least high school education, often good skills in reading comprehension, spelling, grammar, and arithmetic. Applicants are often tested for clerical aptitude.	Rapid increase
Bookkeeping Workers	High school graduates who have taken business arithmetic, bookkeeping, and accounting; some preference for junior college or business school graduates; some on-the-job training; above average aptitude for working with numbers and concentration upon details; should be able to type and operate various types of office machines; ability to work as team member important.	Slow increase, but re-
Cashiers	High school graduate, with courses in business arithmetic, bookkeeping, typing, and other business subjects good preparation; some federal and vocational school training available, as is some on-the-job training; some promotion from below; should have ability to perform repetitious work accurately, finger dexterity, high degree of eye-hand coordination, aptitude for working with figures, neat in appearance, good skills in human relations.	Rapid increase
File Clerks	High school graduate; some federal, vocational, and on-the-job training available; accurate and rapid reading skills, excellent spelling, like detailed work; neat appearance, good team skills, not easily bored by repetitive tasks. Room for advancement.	Moderate increase
Hotel Front Office Clerks	High school graduates with some clerical aptitude for beginning jobs; college training asset for managerial positions; neatness; good human relations skills, including courteous and friendly manner and ease in dealing with people. Usually on-the-job training available; various modalities for upward mobility.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK
Office Machine Operators	High school or business school graduates preferable, with existing knowledge of operation of basic office equipment; courses in business arithmetic and typing very helpful; amount of instruction and on-the-job training dependent upon types of machines to be operated (where needed, generally on-the-job training, but federal and other training also available); finger dexterity, eye and hand coordination, good vision, attention to details, so mechanical ability is also sometimes desirable, and promotion generally from within.	Slow increase, but replacement good
Postal Clerks	Must be at least 18 years old, pass written examination measuring reading accuracy, ability to follow oral instructions, general intelligence, and ability for simple arithmetic; physical examination (must be able to lift mail sacks weighing up to 70 pounds); preferential point scores in hiring to certain veterans; on-the-job training for new clerks; good memory, good coordination, good team and human relations ability. Generally relatively good promotion opportunities from within.	Slow increase, but replacement needs good
Receptionists	Generally high school graduation, with courses in English, spelling, typewriting, elementary bookkeeping, and business practices being helpful; neat and pleasing personality; ability to work independently and make good judgments.	Rapid increase
Shipping & Receiving Clerks	Preferably high school graduates, with background in business arithmetic, typing, and other courses helpful for engaging in paper work; legible handwriting; dependability; ability to work well at repeated tasks under close supervision; interest in learning about firm's products, etc. Usually on-the-job training.	Slow increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Statistical Clerks	High school graduates with logical minds, aptitude for working with numbers, and ability to do detailed work preferable, as well as those who are tactful and even tempered. Background in business arithmetic, bookkeeping and typing extremely helpful. On-the-job training, with promotion largely from within.	Moderate growth
Stock Clerks	High school graduates are preferable, especially with good reading and writing skills, basic knowledge of mathematics, and typing and filing abilities; good health, including good eyesight; usually on-the-job training; in some instances, bonding is necessary.	Rapid growth
Stenographers and Secretaries	High school graduation generally required, with preferences for college or business school graduates. Federal and other training programs provided; usual qualifications also include ability for stenographers to take shorthand at 80 words per minute, and type at 40 words per minute as a minimum (e.g., shorthand reporters for Federal Government must take minimum of 175 words per minute). Must have good hearing, good knowledge and use of spelling, punctuation, grammar, and vocabulary, to concentrate amidst distractions; should be poised and alert, with pleasant personalities, and appropriate characteristics of discretion, judgment, and initiative.	Rapid growth
Typists	Generally high school diplomas, with good spelling, punctuation, and grammar being essential; assets include ability to operate office machines and a knowledge of office procedures. Must be neat and accurate. A number of typist training programs available.	Rapid growth

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK
COMPUTER AND RELATED OCCUPATIONS		
Electronic Computer Operating Personnel	High school education or some college training, aptitude tests often required; some on-the-job training, but keypunchers generally sought already with skills (which can be obtained in variety of settings, including high schools, vocational schools, private computer schools, business schools, colleges, and Federal government also has training programs)	Variable, rapid for console and auxiliary equipment operators, but slow or decrease for keypunch operators
Programmers	Requirements vary with nature of job, ranging from on-the-job training to individuals already with agencies, et cetera, to graduate training in highly scientific operations; training is mandatory, as are persons with aptitudes for logical thinking and exacting analysis, patience, persistence, and abilities to work with extreme accuracy. Ingenuity and imagination are especially important in many situations.	Rapid growth, but best opportunities for person experienced and qualifie in both programming and and systems analysis wh keep up-to-date with latest equipment and techniques.
Systems Analysts	Generally bachelor's or graduate degree and experience in mathematics, science, engineering, accounting, or business. Persons with prior experience preferable, especially in computer programming; aptitude for logical thinking, should like to work with ideas; independent working ability, great concentration, pay close attention to details.	Rapid growth
BANKING OCCUPATIONS		
Bank Clerks	High school graduation generally adequate for most beginning jobs of clerical nature; courses in bookkeeping, typing, business arithmetic, and office machines are helpful; brief tests to determine applicants' abilities may be given; need to work rapidly and accurately, communicate effectively with others, as a team member, and work well under close supervision. Additional education obtained can help one advance	Rapid growth

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
Bank Officers	Usually college graduation (business administration major in finance or a liberal arts curriculum including accounting, economics, commercial law, political science, and statistics serve as excellent preparatory programs for officer trainee positions), and excellent experience can be gained through summer employment programs; in addition, banks usually have trainee programs for persons meeting minimum educational requirements; need tact, good judgment, ability to work independently and with others; continued educational attainment in appropriate areas can help advance career progression.	Rapid increase
Tellers	High school graduates experienced in clerical work, with strong qualities of maturity, neatness, tact, and courtesy; independent work under extremely close supervision; must like to work with and work well with detail; be willing to be confirmed to very small work area; must be bonded; short on-the-job training period; progression is possible for some with additional experience and educational qualifications.	Rapid increase
INSURANCE OCCUPATIONS		
Actuaries	Minimum educational requirement is bachelor's degree with a major in mathematics, statistics, economics, or business administration, and thorough foundation in calculus, probability, and statistics. Desirable background courses also include insurance law, economics (irrespective of major), and accounting. Must complete full series of exams for full professional status, a process generally requiring between five to ten years after career onset.	Rapid increase
Claim Adjusters	College graduation or specialized experience in approriate areas required, with legal training desirable but not necessary. Open, e.g., to liberal arts ma-	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
Claim Adjusters (cont.)	jors. Home study courses available. Good skills in observation, interpretation, dealing with individuals.	
Claim Examiners	College graduates preferred, but high school graduates with good records and experience in clerical work or some college training generally acceptable. Courses in insurance, economics, or other business subjects helpful. On-the-job training under a supervisor is provided. Some study courses available. Effective communication required, as is familiarity with revelant rules and regulations; some mathematical skill; good memory; enjoy working with detail.	Largely replacement
Underwriters	Although some good high school graduates trained for position, generally prefer college graduates with liberal arts or business administration degrees; on-the-job training, additional courses provided; should be competent and enjoy working with details, relating and evaluating facts, making sound, but prompt decisions; effective in communication; imaginative; aggressive.	Moderate growth
ADMINISTRATIVE AND RELATED OCCUPATIONS		
Accountants	Generally bachelor's degree, with increasing preference for master's degree, with master's and increasingly doctoral degree required for academia. Previous work experience, which can be earned via internship programs, helpful in obtaining employment. Continued study required for progressive professional development. Certification required to be a CPA. Must be neat and accurate and have aptitude for mathematics. Supervisory positions require individuals with good skills in that area.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Advertising Workers	Generally college graduates with liberal arts training or majors in advertising, marketing, journalism, or business administration preferable, although no typical educational background can be equated with professional success. Copywriting, work on school publications, summer jobs with marketing research services are all helpful. Much on-the-job training for outstanding college graduates recruited by major companies. Need a flair for oral and written communication, above average ability for problem-solving; should be interested in people and things; be tactful; be able to accept criticism well and work as a team member.	Moderate increase
City Managers	Minimum educational qualification is bachelor's degree, preferably in political science or public administration, with master's degree in public or municipal administration being preferable. Need to enjoy and be competent at working with details and as team member, have sound judgment, self-confidence, perform well under stress; must have good problem-solving ability, be tactful, work well with others, and be able to communicate effectively. Must also be dedicated since long hours in crisis quite common.	Rapid increase
College Student Personnel Workers	Bachelor's degree minimum requirement, with special positions requiring master's or doctoral degrees. Master's degree in clinical psychology or counseling psychology usually required for college counselors. Business administration helpful for those in college admissions, et cetera. Data processing familiarity often an asset. Must be interested in and work well with people from a multiplicity of backgrounds; must have patience; good emotional stability; ability to function well under pressure.	No increase to relative slow, depending upon financial status of colleges/universities.

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Credit Officials	Increasingly must have college degree for minimum entry, preferably in business administration, economics, or accounting, but some liberal arts majors are hired, as are some high school graduates with prior experience in credit collection or processing credit information. Management training often provided on-the-job. Many formal programs of training available. Must be able to analyze detailed information well, draw valid conclusions, be very pleasant, effective oral and written communicative skills.	Rapid increase
Hotel Managers & Assistants	College education becoming increasingly important, especially four-year college program in hotel and restaurant administration. Courses in hotel work taught in some few junior colleges, as well as through the American Hotel and Motel Association, also helpful. Need courses in hotel management to include hotel administration, accounting, economics, food service management and catering, and hotel maintenance engineering. Experience gained in summer employment by students in hotels or restaurants can be very helpful. Managers need initiative, self-discipline, ability to organize work and run operation. Concentration on detail should be good, problem-solving ability absolutely essential. Effective relationships with others, including supervisory skills.	Rapid increase
Industrial Traffic Managers	College education beginning to become important as mandatory. Degree in traffic management desirable, but training in liberal arts (including some courses in transportation, management, economics, statistics, marketing, or commercial law) helpful. Ability to analyze numerical and technical data; work independently; present facts convincingly necessary.	Slow increase, largely

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Lawyers	Admission to the bar, almost always dependent upon graduation from an approved law school (some variation by states). Important background courses for law students include English, history, economics and other social sciences, logic, and public speaking. Those wishing to specialize need additional relevant background courses. Must demonstrate an aptitude for law, usually through LSAT; advanced study highly desirable for those wishing to specialize, teach, or engage in research. Should like to work with people and ideas, and be able to win confidence of their clients.	Moderate increase
Marketing Research Workers	Usually bachelor's degree, with increasing emphasis on post-graduate training. Previous experience in other types of research highly desirable. Need background courses in statistics, English composition, speech, psychology, and economics, and also courses in perti[illegible] related areas. Assets include data processing [illegible]edge. Must be extremely resourceful, except[illegible]riters.	Rapid increase
Personnel Workers	Increas[illegible] college graduates, with majors in business administration or personnel administration; specialized training necessary for certain jobs. Often greater preference given to experienced individuals. Formal or on-the-job training programs generally available. Must have good oral and written communicative skills; ability to grasp various viewpoints effectively; team working essential; supervisory and other responsible skills should be strong; must like detail, be persuasive, have very congenial personality.	Rapid increase
Public Relations Workers	Generally college education or journalism experience is best preparation, with appropriate skills in speciality areas, where necessary. Creativity, initiative, and ability to express ideas and thoughts critical skills. Outgoing personality, self-confidence, understanding of	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Public Relations Workers (cont.)	human personality. Able to movitate persons well. Highly developed sense of competitiveness and ability to function as team member. Some formal on-the-job training programs available.	
Purchasing Agents	Generally college graduates, often with specialized training in relevant areas. Must learn about the company's products, operations, and needs, have good judgment, ability to analyze numbers and technical data, make responsible decisions, have ability to work independently and collectively, be tactful, and be able to motivate persons.	Moderate increase
SERVICE OCCUPATIONS		
CLEANING AND RELATED OCCUPATIONS		
Building Custodians	Should need simple arithmetic and be able to follow instructions well; skills generally learned on on-the-job training.	Moderate increase
Exterminators	Relatively short on-the-job training programs; growing number of states requiring written examination, still primarily for purposes of registration; tendency for employers to prefer high school graduates with good, safe driving records, and in good health; must be eligible for bonding in most cases; courteous, tactful, and well-groomed. Manual dexterity and mechanical ability required. Those wishing to advance should improve skills related to supervision, knowledge (including chemical aspects) of job, and have good salesmanship qualities.	Rapid increase
Hotel Housekeepers & Assistants	Increasingly high school diploma and prior experience highly desirable. Training in housekeeping available from various sources. Independent working ability and effective supervisory skills needed. Analysis of numbers and written data also important.	Largely replacements, due to promotion from within.

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
FOOD SERVICE OCCUPATIONS		
Bartenders	Most bartenders learn their trade on the job and especially by observing bartenders while the would-be bartenders worked as waiters, waitresses, barboys, bargirls, or busgirls, et cetera. Must have knowledge of various laws or regulations affecting dispensation of alcoholic beverages, have pleasant personalities, good physical stamina (frequent standing and heavy lifting from time to time), be able to measure and pour ingredients quickly and accurately; meet age and health requirements for specific states; in some states, must be bonded; and should have good qualities related to pleasing patrons.	Moderate increase
Cooks and Chefs	Generally skills acquired on jobs in lower professions or occupations (such as kitchen helpers), but also can obtain some formal training in cooking fields. Experience extremely helpful, especially in restaurant or large-scale cooking. Some federal and other training programs available. Military training excellent in this respect. On-the-job training often provided for cafeteria workers by school systems, with continuing educational provisions. Should enjoy working with others, and under pressure. Cleanliness, keen sense of taste and smell essential. Supervisory skills appropriate for those wishing to advance. Also many may move up to related positions, such as teaching cooking, becoming caterers, operating their own establishments, et cetera.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Meatcutters	Usually acquire skills on the job through apprenticeship or informal training programs, generally by being hired and trained by an individual retailer or wholesaler. A few enter through vocational school training. Some federal training possible. Usually high school graduates with potential to develop into meat market or department managers preferred. Course in business arithmetic on high school or vocational school level desirable. Pleasant personality, as well as net appearance, effective communication are also desirable. Manual dexterity, good depth perception, color discrimination and good eye-hand coordination essential. Above average strength also important. Health certificate often required. Many places of employment unionized.	Almost no increase expected
Waiters & Waitresses	Preference given to persons with some high school education, with most skills acquired in on-the-job training, although some formal training programs, such as those by Federal Government, available. Need to have pleasant personality and appearance, good physical health and stamina, should be good at arithmetic, and health certificate usually required. Few advancement positions, but some are possible.	Moderate increase
PERSONAL SERVICES OCCUPATIONS		
Barbers	Must be licensed, which requires graduation from a State approved barber school, completion of at least eighth grade, meeting certain health and age requirements (either 16 or 18 years old), and certification often dependent upon passage of written and demonstration tests. Many public and private schools offer courses, as do a few vocational schools, and some prisons. Patience, unusually good disposition, good physical health and stamina are important requirements. Additional positions available through further experience or training, such as instructors.	Largely replacement

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Bellmen and Bell Captains	No specific educational/training requirements but high school education becoming increasingly preferable. Must have good strength, be neat, tactful, courteous, and ability to relate well to customers is helpful in obtaining tips. Knowledge of community resources of interest to customers is definite asset.	Largely replacement
Cosmetologists	License is required in all states, and must usually be at least 16 years of age, completed 10th grade, and have health certificate. Many states require high school diploma. Must complete State-approved course in cosmetology, and, in some instances, can substitute appropriate apprenticeship period. Courses available in many public and private institutions. Need finger dexterity, sense of form and artistry, ability to follow customers' instructions, and should be neat and have pleasant personalities. Possibility for career advancement through additional experience or training, including operation of one's own shop, supervision of others in hotel shops, et cetera.	Rapid growth
Funeral Directors & Embalmers	Must be licensed, with most states requiring embalmers to be 21 or more years of age, with a high school diploma or its equivalent, and graduation from a mortuary science school, serving an apprenticeship, and passage of a State examination. 44 States also require funeral director to be licensed, with similar qualifications to those for embalmer. High school students can begin preparation by taking courses in biology, chemistry, speech, and psychology, and through part-time jobs. Need good communicative abilities, persuasion abilities, tact, courtesy, and desire and ability to comfort people during their periods of grief.	Largely replacements

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
PRIVATE HOUSEHOLD SERVICE OCCUPATIONS		
Private Household Workers	Generally no formal educational requirements but skills in cooking, sewing, washing, ironing, cleaning house, and childcare, with preferences given to persons who have functional knowledge of relevant equipment. Some training programs have been provided by Federal government and other agencies, especially State employment and welfare agencies. Requires good physical stamina, ability to work independently, to get along with people, to want to help people. Should be neat and clean, and willing to be submissive. Health certificate sometimes required. Should like to work with hands and take pride in work.	Largely replacements, for maids and child-care.
PROTECTIVE AND RELATED SERVICE OCCUPATIONS		
FBI Special Agents	Usually must have graduated from a State-accredited resident law school or four-year resident college with accounting major. Law school graduates must also have had at least two years prior training in resident undergraduate work, and accounting majors must have had at least one year's experience in accounting and or auditing. Also available are positions to persons with four-year resident degree in physical science major or fluency in foreign language for which FBI has a need. Other specialized training and experience on professional, executive, complex investigative or other area also used when needed. Must be U. S. Citizens, at least 23 and not more than 40 years of age, and willing to accept service anywhere in U. S. or Puerto Rico. Must be at least 5'7" tall, capable of strenuous physical exertion, excellent hearing and vision; normal color perception and no physical defects preventing use of firearms or engaging in dangerous	Probably no significant in- increase, largely replac ment for very low turnove

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
FBI Special Agents (cont.)	assignments. Must pass rigid physical and other assignments, have good moral character, and meet other requirements specified by the Bureau. Special training provided by FBI for accepted applicants.	
Firefighters	Has been open to men who pass written intelligence tests, medical examination, tests of strength, physical stamina, and agility, are of certain age (usually at least 21), certain height and weight requirements, and who have at least high school education. Training in firefighter procedures provided, generally through the area's fire school. Number of continuing education courses provided. Mental alertness, courage, mechanical aptitude, endurance, sense of public service, initiative, good judgment, and the like are extremely important characteristics, as are abilities to live and work closely together with others under conditions of stress and danger, and within the firehouses. Must be able to get along well with others, and, for promotion, must have appropriate supervisory and leadership skills, including adequate knowledge of firefighting and being able to gain confidence of workers. It is likely that some few peripheral jobs will be developed for women in the years ahead.	Rapid increase
Guards and Watchmen	No specific requirements, but preferences given to high school graduates with appropriate training, or appropriate qualifications (e.g., Federal jobs given to veterans), or who acquire on-the-job training. Should have good character references, with no police records. Good health, especially in hearing and vision. Good personal habits, including neatness, dependability, resourcefulness. Should be mentally alert and emotionally stable, physically fit.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Police Officers	U. S. Citizens, generally at least 21 years old, meet certain height and weight standards and be highly competitive on examinations, education, and experience. Good personality traits, such as honesty, good judgment, and sense of responsibility. Good mental health. Increasingly, officers are being encouraged to and aided in continuing education, especially in post-secondary courses in psychology and sociology, and in law enforcement-related areas. Training programs provided if accepted.	Probably rapid, but certainly replacements
State Police Officers	Similar to those of Police Officers.	Rapid increase
Health & Regulatory Inspectors (Government)	Able to accept responsibility and like detailed work; neat and personable; effective communicators; strong curiosity; keep abreast of field; persuasiveness is decided asset. Various requirements depending upon particular job. U. S. Food and Drug Administration requires bachelor's degrees in science, with at least 18 semester hours of chemistry or biology for food and drug inspectors, and achievement of satisfactory score on FSEE. On-the-job training is provided to successful applicants. Additional assistance possible in career advancement, through informal and formal training mechanisms. High school diploma and experience in meat or poultry slaughtering or processing generally are minimum requirements for meat and poultry inspector, et cetera.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Construction Inspectors (Government)	Usually several years of experience as a construction contractor, supervisor, or craftsman, and high school diploma. Often preferences given to those completing apprenticeship programs, with at least two years of training toward engineering or architectural degree. Good physical condition, passage of civil service examination, when warranted, and the like.	Rapid increase
OTHER SERVICE OCCUPATIONS		
Mail Carriers	At least 18 years of age, passage of a four-part written examination, similar to that required for postal clerks; driver's license if driving required; physical examination, including lifting 70 pounds of mail; and the like. Part and fulltime jobs are available, as is on-the-job training for successful applicants, and promotions typically from within.	Slow growth
Telephone Operators	Should like to serve public, be pleasant and courteous, accurate, able to sit in confined space for long period of time, have pleasing and clear voice, pass required physical and general aptitude examinations. On-the-job training is provided.	Largely replacements
EDUCATION AND RELATED OCCUPATIONS		
TEACHING OCCUPATIONS		
Kindergarten & Elementary School	Certification by the Department of Education within the State employing them, including appropriate college training, and whatever other requirements may be imposed, such as training in child development.	Generally replacements, relatively stiff competi

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
Secondary School Teachers	Certification required of all public, and generally of all private and parochial secondary school teachers within rules & regulations of the State. College education required and post-collegiate education often desirable, particularly for advancements in positions and salaries.	Largely replacements, but competition will be stiff, and there will be variatio within specific fields of specialization.
College & University Teachers	Master's to doctoral or other terminal degrees generally required, along with other appropriate requirements for professorial appointments. Possibilities for college & university teachers to seek non-collegiate/university appointments.	Keen competition, with enro ment being an important va ables, as is continuing fa tor of increasing supply.
LIBRARY OCCUPATIONS		
Librarians	Generally a master's degree in library science, but advanced degrees helpful. A reading knowledge of at least one foreign language often required or helpful too. Extensive knowledge of specialized areas needed for specialized librarians, such as medical or law librarians. Certification is generally required within States. Desirable personality characteristics include high degree of intelligence, good ability to interact with co-workers and public or those served, good in verbal expression, and in helping others to search out desired materials.	Slight increases, largely r placements, but increasing emphasis upon trained or librarians.
Library Technical Assistants	Generally training is received on-the-job or in formal training settings, such as junior or community colleges. Typing often required. Should enjoy detail and have manual dexterity, good verbal and numerical ability. Good physical condition, inasmuch as standing, bending, stooping often required.	Probably good, largely replacements
SALES OCCUPATIONS		
Automobile Parts Countermen	High school or vocational school training in automobile mechanics, commercial arithmetic, salesmanship, and bookkeeping are helpful. Should know types and functions of equipment to be sold, able to work with numbers, and have appropriate personality for dealing with public. Good memory and good handwriting are also necessary.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
Automobile Salesworkers	Usually high school diploma, with courses in public speaking, commercial arithmetic, English, business law, psychology, and salesmanship being highly desirable. Previous sales experience or contact with public also desirable. On-job-training generally provided. Continuing education often possible. Should be neat, tactful, have good self-confidence, initiative, aggressiveness, determination, perserverance.	Moderate increase
Automobile Service Advisors	Generally trained on the job, with preferences given to high school graduates, at least 22 years of age, with experience in automobile repair or related activities. Promotion usually from within. Should be neat, courteous, even-tempered, attentive listeners, and good conversationalists. High school or vocational school courses in automobile mechanics, commercial arithmetic, salesmanship, public speaking, and English are helpful.	Rapid increase
Gasoline Service Station Attendants	High School completion is advantageous but not required for attendants, but is for management training programs for service station managers functioning under oil companies. Should have driver's license, good safety record, general understanding of automobile works, and some sales ability. Should also be friendly, neat, courteous, good speaking ability, self-confident. Need to know simple arithmetic, how to keep business records, be familiar with roads or mapreading, and points of local interest. Generally on-the-job- training, but some formal training programs are available.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOKS***
Insurance Agents & Brokers	College graduates or high school graduates with work experience generally required, with courses in accounting, economics, finance, business law, and insurance subjects being helpful. Must be licensed in States where practicing. Requires passage of written examinations, including knowledge of State rules and regulations. Various on-the-job and more formal training programs available. Should be enthusiastic, self-confident, able to communicate effectively with wide variety of people, work without supervision, strong initiative, and those with unusual ability in sales and leadership have good promotional opportunities.	Moderate growth
Models	Many modeling schools and agencies available for training, but must be well proportioned and slim, be photogenic, have perfect groom-poise, pleasant personality, good physical health, good physical stamina, able to work under pressure and demanding conditions, work as a team member, or cooperatively with others. Can be a stepping stone, depending upon how position is used and whatelse is available "at right time."	Moderate increase, but largely replacements, highly competitive
Manufacturers' Salesworkers	College graduates increasingly preferred, with appropriate training where necessary, and some on-the-job training is provided. Need pleasant personality, good appearance, ability to get along with variety of persons, good physical stamina, good arithmetical skills; opportunities for advancement good for those with good sales and leadership abilities.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Real Estate Salesworkers & Brokers	License required, with examination including items on basic real estate transactions and laws affecting property sales; generally experience in seeling real estate or the equivalent in related experience or education also required. High school education usually preferred, with courses in selling, architectural drawing, business law, economics, and public speaking being helpful. Assets are college degrees, with training in real estate subjects, psychology, economics, finance, and business administration. Knowledge of local neighborhood and contacts also assets. Formal training generally offered by hiring firm. Should have pleasant personality, be honest and neat. Maturity, tact, self-confidence, enthusiasm, and aggressiveness are good traits.	Moderate increase
Retail Trade Salesworkers	High school graduates preferred, with background in courses (or experience) in salesmanship, commercial arithmetic, home economics, various distributive educational programs. Should have great enjoyment in working with people, be neat, courteous, tactful, interest in sales work, ability to communicate clearly. Should be healthy, and have good simple arithmetical skills. College graduates with good skills have good promotional opportunities.	Moderate increase
Routemen	Must be good drivers with good sales abilities, and good knowledge of products, as well as pleasant voice and speaking ability, neat appearance, self-confidence, initiative, and tact. Should be able to work without direct supervision, write legibly, do simple arithmetic. High school graduates, at least 25 years old are preferred. Many positions require bonding. Formal training, summer experience, on-the-job training all entry mechanisms.	Largely replacement

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Wholesale Trade Salesworkers	Generally applicants with postsecondary education preferred, and, in some cases, specialized training, such as engineering, is required. Formal training programs provided by employers. Prefer persons with usual characteristics deemed desirable for salespersons. Hours often long, irregular, and travel away from hour frequent. Good physical health, especially for being on feet, required.	Moderate increase
Securities Salesworkers	Increasingly college education is required with good knowledge of or ability to maintain knowledge of economic conditions and trends (with lower requirements for part-time workers selling mutual funds). Business administration, economics, and finance courses are helpful. A license by the State is generally required, as is registration with securities exchanges where they do business. On-the-job training generally provided. Applicants should be well-groomed, able to motivate people, and ambitious, mature, capable of independent work, and previous success in employment is good asset.	Moderate increase
CONSTRUCTION OCCUPATIONS		
Asbestos & Insulation Workers	Generally four-year "improvership" (similar to apprenticeship) program; applicants should be between 18 and 30 years of age, in good physical condition.	Rapid increase
Bricklayers	Generally apprenticeship, with applicants who are generally between 17 and 24 years of age, high school education desirable; ability to solve arithmetical problems quickly and accurately is an asset.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Carpenters	Generally four-year apprenticeship program, although many learn informally, through correspondence courses, or through trade school courses. Apprenticeship applicants should usually be between 17 and 27 years old, preferably with high school education. Good physical condition, good sense of balance, and a lack of fear of working at high places or on high structures are all assets, as are manual dexterity, swift and accurate arithmetical skills, and an ability to work well with others.	Moderate increase
Cement Masons	Generally a three-year apprenticeship program, although informal training methods are used by many persons. Apprenticeship applicants are usually expected to be 18 to 25 years of age, in good physical condition, with good manual dexterity, the ability to work as a team member, and the ability to direct the activities of others.	Rapid increase
Construction Laborers	No general educational requirements; should be at least 18 years of age, in good physical condition; tendency toward employers providing short (about four weeks) on-the-job training programs.	Largely replacements
Electricians (Construction)	Four-year apprenticeship program is preferable, but a few learn informally. License is generally required, which requires passing an examination. Heavily unionized.	Rapid increase
Elevator Constructors	Generally informal and formal on-the-job training, with helper-trainees being at least 18 years old, in good physical condition, with a high school education or its equivalent, preferably with courses in mathematics and physics. Mechanical aptitude and interest in machines quite important.	Rapid increase
Floor Covering Installers	Apprenticeship training, with preferable applicants being 17 to 30 years of age with high school education, average physical strength, good manual dexterity, neat in appearance, and a pleasant business-like manner.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Glaziers	Generally three-year apprenticeship programs, with preferred applicants being between 18 and 26 years of age. Veterans exempt from maximum age limit. High school or equivalent education required. Some informal training, and especially for painters and paperhangers, also available.	Rapid increase
Lathers	Two-year apprenticeship program generally recommended. But many learn informally as helpers. Applicants for apprenticeship should be between 16 and 26 years of age in most instances, in good physical condition, capable of passing examinations testing for manual dexterity and finger dexterity, and other qualifications. High school education encouraged, including completion of appropriate courses in mathematics.	Rapid increase
Marble Setters, Tile-Setters, and Terrazzo Workers	Generally three-year apprenticeship programs, although informal on-the-job methods are also available. Apprenticeship applicants should be between 17 and 22 years of age, with high school education or equivalent. Good physical condition and manual dexterity are important assets. Good sense of color harmony also necessary.	Moderate increase
Operating Engineers (Construction Machinery Operators)	Generally three-year apprenticeship program, for persons between 18 and 30 years of age, with high school education or equivalent, good physical condition, ability and aptitude to master the trade.	Rapid increase
Painters and Paperhangers	Generally three-year apprenticeship program, with applicants between 16 and 25 years of age. Good physical condition. high school education preferred. Good manual dexterity. Discerning color sense. Free from allergies to paint fumes and other materials used in trade.	Slow increase, largely replacements
Plasterers	Although apprenticeship is considered best, with applicants desired between 17 and 25 years of age (waivered for veterans), informal learning settings for helpers or laborers also available. Good physical condition, manual dexterity needed.	Slow increase, largely replacements

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Plumbers & Pipefitters	Generally five-year apprenticeship program, with applicants between 16 and 25 years of age; high school education or its equivalent, with courses in mathematics, physics, and chemistry, generally recommended. Tests frequently given to determine mechanical aptitude. Many also learn skills informally, on-the-job training as helpers.	Moderate increase
Roofers	Generally three-year apprenticeship programs, for persons between 18 and 30 years of age (waived for veterans), with high school education or equivalent, with courses in mathematics, being desirable. Good physical condition, good sense of balance are important assets.	Rapid increase
Sheet-Metal Workers	Generally four-year apprenticeship program, with applicants between 18 and 25 years of age (special consideration may be given for military veterans). High school education or its equivalent is required. Good physical condition, good mechanical ability also required.	Moderate increase
Stonemasons	Generally three-year apprenticeship program, with applicants between 17 and 24 years of age, with high school education or equivalent being desirable, and good physical condition being extremely important. Informal training methods, primarily for helpers, also available.	Largely replacements
Structural-, Ornamental-, and Reinforcing-Iron Workers, Riggers, and Machine Movers	Generally three-year apprenticeship, with applicants being between 18 and 30 years old. Good physical condition is required. High school education is desirable.	Moderate increase
OCCUPATIONS IN TRANSPORTATION ACTIVITIES		
AIR TRANSPORTATION OCCUPATIONS		
Air Traffic Controllers	Trainees selected through competitive Federal Civil Service System; must be at least 31 years old, pass written test measuring ability to learn and perform controller's duties. Must have three years of progressively responsible work experience that demonstrates potential for learning and performing air traffic control work, or four years of college, or combination of both. Excellent health. Vision correctable	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Flight Attendants (cont.)	or other forms or training or experience in dealing with public given preference. Fluent speaking of appropriate foreign language important for international flight attendants. Training generally provided directly by airlines, or by those they designate to provide such training.	
Flight Engineers	Generally commercial pilot's license required. Also required is flight engineer's license from FAA, qualifications for which include three years of experience in repairing or overhauling aircraft and engines or experience as a pilot or flight engineer in the Armed Forces. Must pass rigid physical examination and a written test on flight theory and engine operation, as well as flight check of operating procedures for the type of plane to which they will be assigned. Airlines generally prefer applicants between 21 and 35 years of age, 5'6" to 6'4" in height, and excellent physical condition. Must be able to cope with pressures and responsibilities that are part of the occupation, and team work ability absolutely essential. Good eyesight (including normal color vision), essential. Must have high school education, and at least two years of college preferable.	Rapid increase
Ground Radio Operators & Teletypists	Usually must have at least third-class FCC radio-telephone or radio-telegraph operator's permit, with a second-class operator's permit preferable. Must be high school graduates with good speaking voices, basic knowledge of language used in weather reports. Must have training or experience in operating teletype equipment and must be able to type at least 40 words a minute. Written test required. Certain experience requirements as well. Federal Civil Service examination basis for appointments.	Slow decrease, largely re-

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Pilots & Copilots	FAA license required; must have commercial airplane pilot's license, with captains needing airline transport pilot's license, and rating for class of plane to be flown. Instrument rating for those flying in bad weather. Applicants for commercial license must be at least 18 years old, with at least 200 hours of flight experience. Instrument rating requires at least 40 hours of instrument flying. Airline transport pilot's license requires one to be at least 23 years old, with minimum of 1,500 hours of flying time during previous 8 years, including night and instrument flying. Must pass strict physical examination, written test, demonstrate ability to fly a plane. Annual physical examination and periodic tests of flying skills required by Government regulations. Pilots may not fly an airliner after age 60. Applicants for copilots with airlines generally should be between 20 and 35 years of age, 5'6" to 6'4" in height, between 140 and 210 pounds in weight. Must be high school graduates, with preferences given to college graduates. Some airlines will not hire anyone without at least two years of college training. Must have good hearing, vision correctable to 20/20, no physical handicaps prohibiting quick reactions. Must pass psychological tests, focused especially upon ability to make quick decisions and accurate judgments under pressure.	Rapid increase
Traffic Agents & Clerks	Strict hiring standards by airlines: good speaking voice required, and good appearance and personality. College training preferable, with high school graduation generally being required.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Air Traffic Controllers (cont.)	to 20/20, and must be able to speak clearly and precisely.	
Aircraft Mechanics	Generally trade learned through informal on-the-job training or through formal apprenticeship programs. Preferred are high school or trade school graduates between 20 and 30 years of age, good physical condition, with courses in mathematics, physics, chemistry, and machine shop. Helpful is experience in automobile repairs or other mechanical work. Larger airlines train apprentices in well planned three or four year programs. Persons with aircraft mechanic experience in military service are usually given credit towards completion of apprenticeship. Must be able to do detailed work. Average strength and agility needed. License required. Heavily unionized.	Rapid increase
Airline Dispatchers	Selected from employees having five to ten years experience with the company; must have FAA dispatcher certificate. Must have worked at least a year under the supervision of a certified dispatcher or complete an FAA-approved dispatcher's course at a school or an airline training center, or similar experience. Assistant dispatchers may have at least two years of college or equivalent amount of time spent in some phase of air transportation, such as dispatch clerks in ground operations. Preference given to college graduates with courses in mathematics, physics, and related subjects. Some experience in flying, meteorology, or business administration also helpful.	Largely replacements
Flight Attendants	Great stress placed upon poise, tactfulness, and resourcefulness, with applicants generally required to be at least 19 years of age, between 5'2" and 6' in height, and appropriate weight proportions. Must be in excellent health, have clear speech, good vision, high school graduate, with those with at least two years of college, nursing,	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
MERCHANT MARINE OCCUPATIONS		
Merchant Marine Officers	Certain legal requirements, including age, proof of U. S. citizenship, U. S. Public Health Service certificate attesting to vision, color perception, and general physical condition. Must have 3 years of appropriate sea experience or be a graduate of an approved training program. Best way to become a well-trained officer is through an established training program, such as those available through the U. S. Merchant Marine Academy (Kings Point, New York), and at five State merchant marine academies (California Maritime Academy, Vallejo; Maine Maritime Academy, Castine; Massachusetts Maritime Academy, Hyannis; Texas Maritime Academy, Galveston; and New York Maritime College, Fort Schuyler). Very high entrance requirements. Admission to the Federal Academy is through nomination by a member of Congress, remaining through written application and acceptance. Most offer three to four year programs in nautical science or marine engineering, as well as practical experience at sea. A number of trade unions in the maritime industry provide officer training.	Moderate decline, some few replacements
Merchant Seamen	Helpful is previous sea experience in Coast Guard or Navy. Must have health certificates. Also seaman's papers from U. S. Coast Guard. To be hired, must be present at hiring hall when opening becomes available. Hiring halls located in chief ports of the country; operated by unions for commercial vessels and by the Navy's Military Sealift Command (MSC) for government-operated ships.	Moderate decline, largely replacements
RAILROAD OCCUPATIONS		
Brakemen	Generally on-the-job training; high school graduates or equivalent preferred; good eyesight and hearing are essential, as is physical stamina for standing, walking, climbing, exposure to all types of weather. Mechanical aptitude is helpful.	Slow decline, few replacements

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Bride & Building Workers	On-the-job training received while helpers is basic way, along with appropriate seniority.	Slow decrease
Clerks	Applicants generally required to have a high school education, sometimes to pass clerical aptitude tests; to have some training or experience in working with figures is preferable.	Moderate decline
Conductors	Movement from within, largely from experienced brakemen with seniority.	Slow decline
Locomotive Engineers	Generally filled from within by training and promoting firemen with appropriate seniority.	Largely replacements
Locomotive Firemen	On-the-job training obtained from experienced engineers.	Rapid decline
Shop Trades	Generally two systems: apprenticeship, with applicants being between 16 and 21 years of age, who have passed mathematical and mechanical aptitude tests; but also through helpers and laborers receiving on-the-job training and being promoted.	Decline, largely replacements
Signal Department Workers	On-the-job training, generally 60 to 90 days, with preference given to high school graduates (or equivalent) with mechanical skill and some knowledge of electricity.	Slight declines, largely replacement
Station Agents	Arise from rank of railroad occupational workers.	Moderate decline
Telegraphers, Telephoners, and Towermen	On-the-job training, with preferable applicants having high school or equivalent education. Must have good hearing and good eyesight, including normal color vision. Must be responsible, alert, and capable of organizing thoughts and actions in emergency or pressure situations. Must be able to work in confined areas.	Rapid decline
Track Workers	Generally on-the-job training lasting about two years with applicants preferred between ages of 21 and 45 years, who can read, write, and do heavy work, must pass physical examination.	Slow decline

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
DRIVING OCCUPATIONS		
Intercity Busdrivers	Required to meet minimum age, health, and experience qualifications established by the U. S. Department of Transportation, including must be at least 21 years of age, able-bodied, with good hearing, and at least 20/40 eyesight without glasses, corrected to 20/20 with glasses; free from serious heart trouble or other physical problems which could endanger passengers; must be able to read and speak English. Companies generally have higher requirements, preferring applicants to be at least 24 years of age, with high school education or the equivalent, passage of comprehensive examinations determining driving skill. Important qualifications include even-temper, emotional stability, courteous, tactful. Previous experience desirable. Training programs conducted by most intercity bus companies, usually between 2 - 6 weeks, but occasionally up to 3 months.	Largely replacements
Local Transit Busdrivers	Companies generally conduct training programs, but applicants usually should be between 21 and 40 years of age, of average height and weight, with good eyesight (with or without glasses), in good physical health, and must pass written and physical examinations. Emotional stability is important and high school graduates generally preferred. Must have valid motor vehicle operator's license and some experience.	Slow increase, largely replacements
Local Truck Drivers	Considerable variation in requirements, but most prefer applicants with two to four years of high school, able to lift heavy objects, in good physical health, at least 21 years of age, with good hearing and at least 20/40 vision, with ability to get along well with people, and appropriate driver's license and knowledge of traffic laws, safety measures, and other rules and regultions. On-the-job training provided. Preference often given to persons with prior experience in area in military.	Moderate increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Long Distance Truck Drivers	Minimum requirements established by U. S. Department of Transportation, including being at least 21 years of age, passing physical examination, good hearing, 20/40 vision (with or without glasses), normal use of arms and legs (unless waiver is obtained), and normal blood pressure. Must be able to read, speak, and write English well enough to make required entries on reports and records. Must have good driving record, must pass road test showing ability to handle vehicle to be driven in regular service. Must pass written examination on the Motor Carrier Safety Regulations of the Department. Also generally must have chauffeur's licenses from State Motor Vehicle Department. Many companies have higher requirements, including preference for drivers who are at least 25 years old, with some high school or completion of high school, and certain weight and height requirements. Some require prior experience. High-school driving courses represent common method of preparing for position. Automechanics course could also be helpful for minor road reparis. Need good, safe, reliable driving record.	Moderate increase
Parking Attendants	No specific educational requirements, but preferences given to individuals with high school education. Must have valid driver's license and skill in handling all types of cars. Clerical and arithmetic skills also helpful for those required to keep records, make change, et cetera. Should be in good physical condition, neat, tactful, courteous. On-the-job training frequently provided.	Slow growth
Taxi Drivers	Necessary most often to have a State-issued chauffeur's license and a special taxicab operator's license issued by the local police, safety department, or Public Utilities Commission. Generally must be at least 21 years old, in good health, with good driving record, and no conviction of a serious crime. Helpful to know locations within area. Should be courteous, tactful.	Slow decline

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
SCIENTIFIC AND TECHNICAL OCCUPATIONS		
Engineers, Scientists, Technicians	In general, increasing emphasis is being placed upon advanced degrees for engineers and scientists, with at least a bachelor's degree being required for entry level. Courses in mathematics, statistics, computer programming analysis, English, and a foreign language are all important. About one-third of all technicians are draftsmen--increasing support and interdisciplinary support is probable wave of the future.	Expansion is anticipated, with variations dependent upon fields.
CONSERVATION OCCUPATIONS		
Foresters	Minimum educational requirement is bachelor's degree with a major in forestry, with advanced degree usually required for teaching and research positions. In 1972, about 51 colleges and univerities (39 of which were accredited by the Society of American Foresters) offered courses in forestry. Stress is placed both upon the liberal arts and technical forestry subjects. Need to have enthusiasm for outdoor work, be physically hardy, and willing to work in remote areas.	Moderate increase
Forestry Aides & Technicians	A specialized one or two year postsecondary school training program is available, as is work experience through various agencies, as well as a government sponsored training program. The Federal Government requires applicants for technican jobs to have had 2 years of related work experience, such as in agriculture. Need to have enthusiasm for outdoor work, physical stamina, and ability to work without direct supervision, as well as to work with survey crews, users of the forest lands, forest owners, and professional foresters. Many jobs require living in remote areas. Should understand basic principles of mathematics and science, be able to express ideas clearly when talking with others, and should be aware of the other materials and techniques used in forestry, in addition to specialized knowledge about own area. Begin work most often as trainees.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Range Managers	Bachelor's degree, majoring in range management or range conservation is usually required, or in Federal Government, degree in closely related area, such as agronomy or forestry. Need graduate degree for resarch/teaching. In 1972, about 14 colleges/universities had such a program. Need basic knowledge of biology, chemistry, physics, mathematics, and communication skills. Many jobs require vigorous physical activity and willingness to work in arid and sparsely populated areas. Also should be able to write and speak effectively and work with others.	Slow increase
Soil Conservationists	Need B. S. degree, major in soil conservation or related area in natural science or agriculture. Should have 30 semester hours, including 3 semester hour course in soils in these fields.	Expanding opportunities for well-trained professionals
Engineers	Generally need bachelor's degree in engineering for entry-level jobs, and advanced degrees and experiences for remaining positions. Such specialities as nuclear engineering available only at graduate level. About 280 institutions offer bachelor's degree in engineering. Need emphasis on undergraduate level in mathematics, physics, chemistry, humanities, social sciences, and English, on the lower-level division, with upper-level division concentrating more nearly on engineering as a specialty. Licensing is required for all engineers whose work may affect life, health, or property, or who offer their services to the public. Registration generally based upon graduation from an accredited program, plus four years of experience, plus passage of an examination. Should be able to work as a team member; have initiative; an analytical mind, capacity for detail, ability to make decisions; clarity of thought and expression. Willing to continue education due to rapidity of changes, et cetera, within field.	Expected to be favorable

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Aerospace Engineers	Usually have degrees in mechanical, electrical or industrial engineering.	Moderate increase
Agricultural Engineers	Develop machinery, equipment, and methods to improve the efficiency and economy of the production, processing and distribution of food and other agricultural products, etc., and generally specialize in research and development, design, testing, production, sales, or management.	Rapid increase
Biomedical Engineers	Use engineering principles to solve medical and health related problems.	Very favorable outlook, but very small in numbers
Ceramic Engineers	Develop methods for processing clay and other non-metallic minerals into a wide variety of ceramic products, et cetera. Generally specialize in one or more products, such as products of refractories (i.e., fire and heat resistant materials), or whitewares.	Very favorable outlook, but very small in numbers
Chemical Egi	The designing of chemical plants and equipment, and determination of the most efficient process to manufacture chemicals and chemical products requires a knowledge of chemistry, physics, and mechanical and electrical engineering.	Moderate increase
Civil engineers	Design and supervise construction of roads, harbors, airfields, tunnels, bridges, water supply and sewage systems and buildings, with major specialties including structural, hydraulic, environmental, sanitary, transportation (including highways and railways), and soil mechanics.	Rapid increase
Electrical Engineers	Design, develop, and supervise the manufacture of electrical and electronic equipment, and design and assist in operating facilities for generating and distributing electrical power.	Rapid increase
Industrial Engineers	Determine most effective methods of using basic factors of production (manpower, machines, and materials).	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Metallurgical Engineers	Develop methods to process & convert metals into useful products, generally specialize within extractive or chemical, physical, or mechanical branches.	Rapid increase
Mining Engineers	Find, extract, and prepare minerals for manufacturing industries to use, et cetera.	Favorable opportunities, since demand is expected to exceed supply
ENVIRONMENTAL SCIENTISTS		
Geologists	Should hold advanced degree, with master's being required for beginning research & teaching and most exploration positions; and with Ph. D. generally being required for advancement in college teaching and high-level research and administrative posts. Bachelor's degree is adequate training for some entry jobs in exploration work. About 300 institutions offer bachelor's degree in geology. Should like the outdoors, have physical stamina, be able to adapt to changes induced by travel to distant countries. Need curious and analytical minds. Should like to work well with others in team.	Favorable opportunities
Geophysicists	Bachelor's degree in geophysics or a geophysical specialty is qualification for most beginning positions in exploration geophysics, as is a degree in related area, if appropriate courses include geophysics, physics, geology, mathematics, chemistry, and engineering. Background in electronic data processing is an asset. Graduate training necessary for research or supervising exploration activities, teaching, et cetera. About 50 colleges have bachelor's degree program. About 60 have graduate programs. Should have good health, enjoy outdoors, be willing to travel, curious and analytical minds, express self well in oral and written communication, work as a team member.	Rapid growth

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Meteorologists	Bachelor's degree with major in meteorology is usually minimum requirement for beginning jobs in weather forecasting, with bachelor's degree in a related science or engineering, along w/ a course in meteorology being acceptable for some positions. Advanced degrees, preferably in meteorology, required for more advanced positions, but can qualify if have advanced courses in meteorology, physics, mathematics, and chemistry. About 42 colleges offered the undergraduate program and about 53 offered advanced degrees in atmospheric science. The Armed Services give and support meteorological training. NOAA has a program providing some summer jobs for college students, and assistance in helping them to complete degrees within area.	Moderate growth
Oceanographers	Minimum educational requirement for beginning professional jobs is a bachelor's degree, with a major in oceanography, biology, earth or physical sciences, mathematics, or engineering. Graduate training required for additional positions. About 46 institutions offer undergraduate degrees in oceanography or marine sciences, but it is interdisciplinary science. Important college courses for oceanographers include mathematics, physics, chemistry, geophysics, geology, meteorology, and biology. About 85 colleges offer advanced degree programs. Should like the sea, be willing to travel.	Good for Ph.D. holders, less for others
LIFE SCIENCE OCCUPATIONS		
Biochemists	Minimum educational requirement for many beginning jobs as professional biochemist is an advanced degree, with bachelor's degrees generally qualifying individuals seeking positions as research assistants or technicians. Precision, keen powers of observation, and mechanical aptitude important, as are analytical abilities and curious minds, patience, perseverance, ability to work independently and as part of a team.	Favorable

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Life Scientists	Need advanced degree, preferably Ph. D. in field of interest, such as botany, agronomy, horticulture, animal husbandry, medical microbiology, anatomy, ecology, embryology, nutrition, pharmacology, pathology. Bachelor's and master's helpful for those seeking positions as assistants or technicians, some high school teaching, sales positions.	Rapid increase
Soil Scientists	Training in institution of recognized standing is crucial in obtaining employment. Federal Government requires B. S. degree with a major in Soil Science or in closely related field of study, and 30 semester hours of course work in biological, physical, and earth sciences, including a minimum of 15 semester hours in soils. Number of fellowships available in this area.	Some increase expected
MATHEMATICS OCCUPATIONS		
Mathematicians	Outside of college teaching (where terminal degree is asset), beginning job requires bachelor's degree in mathematics or a major in an applied field, such as physics or engineering, with minor in mathematics. Interested persons need to take as many courses in mathematics in high school as possible. If entering applied mathematics, also need training in the field of application. Need good reasoning ability, persistence, and ability to apply basic principles to new types of problems. Must be able to communicate well with others, be efficient and accurate.	Competition for positions generally expected to increase, even on doctoral level.
Statisticians	Minimum requirement generally bachelor's degree in statistics or mathematics, or with a major in economics or another applied field and a minor in statistics, with graduate degrees being mandatory for advanced positions, including college teaching, administrative, and consultative positions. About 80 institutions offered a bachelor's degree, about 100, advanced degrees. Need such courses as differential and integral calculus,	Favorable outlook

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Statisticians (cont.)	statistical methods, and probability theory. Assets often include courses in computer uses and techniques.	
PHYSICAL SCIENTISTS		
Astronomers	Usual requirement is Ph. D., with individuals with lower degrees being eligible for positions as assistants or technicians. Ph. D. is regarded as minimum requirement for qualifying as an astronomer.	Not generally good
Chemists	Minimum requirement generally bachelor's degree, for beginning a career, with advanced training essential for most positions. Should enjoy studying science and mathematics and like working with hands. Perserverance and ability to concentrate upon detail and work independently essential. Need inquisitive mind, good memory, imagination. Need good eyesight and good eye-hand coordination. Many organizations have training programs for bachelor degree graduates.	Favorable
Food Scientists	Bachelor's degree with a major in food science, or in one of the physical or life sciences is usual minimum requirement for beginning jobs in food sciences, with advanced degree necessary for many jobs, especially research and college teaching, and some management jobs in industry. Need analytical minds, like details and technical work; must be able to express ideas to others, and understand ideas of others. Need flexibility, imagination, creativity.	Moderate growth
Physicists	Bachelor's degree in physics is minimum requirement for entry, but graduate training increasingly required. Need inquisitive mind, good memory, and imagination, distrust of conventional assumptions about the universe, eager to try new approaches to discovery of truth.	Favorable outlook for Ph. D.'s

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
TECHNICIAN OCCUPATIONS		
Broadcast Technicians	Need Radiotelephone First Class Operator License from FCC, which requires passage of series of examinations covering construction and operation of transmission and receiving equipment, characteristics of electromagnetic waves; and Federal Government and international rules and regulations covering broadcasting. Helpful courses in high school include algebra, trigonometry, physics and other sciences. Building and operating an amateur radio station is good training. Electronics course is also helpful. Can gain experience through temporary or summer jobs or through courses provided in many schools.	Slow increase
Draftsmen	Necessary training can be acquired in technical institutes, junior and community colleges, extension divisions of universities, and vocational and technical high schools, or thorugh on-the-job training programs combined with educational courses, or through apprenticeship programs. Need courses in mathematics, physical sciences, mechanical drawing, and drafting. Shop practices and skills very helpful. Should be able to do detailed work requiring high degree of accuracy; have good eyesight and eye-hand coordination; function as team member, be able to do free-hand drawings of three dimensional objects.	Favorable
Engineering & Science Technicians	Many combinations of work experience and education possible, with preferences in hiring given to persons with some specialized training, generally available at technical institutes, junior and community colleges, area vocational technical schools, extension divisions of colleges and universities, and technical-vocational high schools, and through various apprenticeship or on-the-job training programs. Should have aptitude for mathematics and science, enjoy technical work, ability to do detailed work accurately, creative talent sometimes helpful. Work under close supervision as team member.	Favorable

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Food Processing Technicians	Training obtained from a variety of institutions or through on-the-job training, with preferences in hiring given to those with some specialized training. Post-secondary training institutions generally require high school education or equivalent. High school courses should include a year each of biology and chemistry, two years of mathematics (algebra and geometry), and statistics, English, and social science courses are also helpful. Usually work as member of team, need to be exacting, dependable, have effective modes of communication, work under supervision.	Favorable outlook
Surveyors	Need post-secondary school courses in surveying and extensive on-the-job training generally, with post-secondary institutions giving preference to those with high school training in algebra, geometry, trigonometry, calculus, drafting, and mechanical drawing. Licensing within States is required of land surveyors responsible for locating and providing descriptions of land boundaries. Need to be able to visualize objects, distances, sizes, and other abstract forms and to make mathematical calculations quickly and accurately. Leadership qualities necessary for advancement to surveyors supervising others. Need to be strong and healthy, enjoy outdoor work. Need good eyesight, coordination, and hearing.	Favorable for those with post-secondary training and experience
MECHANICS AND REPAIRMEN	Generally skills are learned on the job or through apprenticeship programs, with some courses available through correspondence or in vocational and technical schools. Need mechanical aptitude and should like to work with hands. High school education generally required, with courses preferred including mathematics, chemistry, physics, blueprint reading, and machine shop. Physical characteristics vary, covering such areas as physical strength, finger and manual dexterity. Need patience and good vision. Generally need good personality.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
TELEPHONE CRAFT OCCUPATIONS		
Central Office Craft Occupations	On-the-job training provided, often within or from lower-level employees, but also from persons hired from the outside. Need good eyesight (no color blindness), ability to work closely with others. Basic knowledge of electricity and electronics and telephone training in the armed services are all helpful. Aptitude tests generally given. Continued training provided by companies.	Moderate increase
Central Office Equipment Installers	On-the-job training provided by companies to applicants meeting qualifications--need good eyesight (no color blindness), ability to work well with others, must pass aptitude test and physical examination.	Moderate increase
Linemen and Cable Splicers	On-the-job training given to successful applicants, who pass aptitude and physical examinations, et cetera. Must be able to distinguish colors. Continued education provided.	Moderate growth
Telephone Servicemen	On-the-job training given by companies to successful applicants. Need good eyesight, good coordination, pleasant personalities, et cetera.	Moderate increase
OTHER MECHANICS & REPAIRMEN		
Air-Conditioning, Refrigeration, and Heating Mechanics	Generally begin as helpers and acquire training and experience by working on-the-job. Preference is given to high school graduates with courses in mathematics, physics, and blueprint reading, good mechanical aptitude and interest in electricity, as well as in good physical condition. Some formal training programs available, including some under auspices of the Federal Government.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Appliance Servicemen	Generally begin as helpers and receive on-the-job training. Preference given to applicants with high school education, mechanical aptitude, and with some courses in electricity, mathematics, and science, and who show ability to get along well with co-workers and customers. Some training programs available in local high schools and trade schools.	Rapid increase
Automobile Body Repairmen	Generally begin as helpers and receive on-the-job training. Some few apprenticeship programs on formal basis available. Some few programs under auspices of Federal Government available. Need to be in good physical condition, with good eye-hand coordination. Courses in automobile body repair helpful. Preference also given to high school graduates.	Moderate increase
Automobile Mechanics	Most learn as helpers in on-the-job training but some apprenticeship and formal training programs in trade and vocational schools, and some high schools available. Both the mechanics and repairmen generally expected to buy their own hand tools.	Moderate increase
Boat Motor Mechanics	Generally as helpers learning in on-the-job training, with preferences given to high school graduates with mechanical aptitudes, background courses in such areas as small engine repair, automobile mechanics and machine shop. Some Federal Government training programs available. Need to buy handtools most often.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Bowling Pin-Machine Mechanics	Generally begin as on-the-job trainees, with preferences given to high high graduates. Courses in electricity, blueprint reading, and machine repair useful. Many trainees also learn at employers' expense by attending training courses in factory. Need good eyesight (normal color vision), eye-hand coordination, and average physical strength. Mechanical aptitude (frequently tested prior to employment), like to work with hands, and have ability to work with spped.	Slow increase
Business Machine Servicemen	Usually need a high school education (preferences given to veterans with military training in electronics), and one or more years of training or experience in electronics. Must pass tests measuring mechanical aptitude, knowledge or electricity or electronics, manual dexterity, general intelligence. Need good eyesight, including color vision. Should have pleasant, cooperative manner, neat appearance and be able to communicate effectively with customers. Should also be honest and trustworthy. Some training programs available in vocational and private correspondence schools, under Federal Government, but generally on-the-job training is available.	Rapid increase
Computer Service Technicians	Applicants generally required to have one or two years' post-secondary training in basic electronics or electrical engineering, available from a computer school, technical institute, college, or junior college, as well as from military service. High school students should take courses in mathematics and physics if interested in this option. Valuable experience can be gained from appropriate hobbies, such as operating ham radios or building stereo equipment. Training programs were available in some cities under Federal Government auspices. Need good close vision, normal color perception, normal hearing, initiative to work without close supervision, pleasant personality, neat appearance, sometimes security clearance, must pass a physical examination.	Rapid increase
Diesel Mechanics	Usually enter as helpers, with on-the-job training, or as apprentices; Trade and technical schools also offer fulltime training for these positions, which generally last from several months to several years. Some Federal Government training programs available. High school graduates with mechanical ability preferred, with prior shop courses in automobile repair and machine shop work, science, mathematics, being assets. Generally expected to buy own hand tools.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Dispensing Opticians & Optical Mechanics	Generally learned on-the-job; formal apprenticeship programs available. Formal institutional training increasing. Need to be high school graduate, with prior courses in basic sciences, with knowledge of physics, algebra, geometry, and mechanical drawing particularly helpful; interest and ability to do precision work essential. Should be tactful with unusually pleasant personality. Increasing number of States requiring licensing of dispensing opticians, which requires successful performance on examinations.	Rapid increase
Electric Sign Servicemen	Generally hired as trainess, learning informally on job. Some enter through apprenticeship programs. High school or vocational school graduates preferred, with courses in mathematics, science, electricity, and blueprint reading helpful. Need good color vision, manual dexterity, physical strength; license often required.	Rapid increase
Farm Equipment Mechanics	Generally hired as helpers, learning on-the-job. Some few enter via apprenticeships or Federal Government training programs. Preferred applicants have farm background, mechanical aptitude, high school education, often with stress upon previous experience or training in diesel and gasoline engines, hydraulics, and welding (subjects usually available in high/vocational schools). Need appropriate strength and manual dexterity, ability to work independently with minimum supervision.	Slow increase, largely replacements
Industrial Machinery Repairmen	Generally learn as helpers through informal on-the-job training. Some enter through apprenticeship programs. High school graduate, prior courses in mathematics, mechanical drawing, blueprint reading, et cetera are assets, with good physical condition, manual dexterity, physical agility being essential.	Rapid increase
Instrument Repairmen	Generally four years on-the-job training and study required, with applicants typically selected from production employees or hired as trainees. Some apprenticeship programs. Some training in technical/junior colleges. Emphasis on basic engineering courses, science, mathematics. Technical training increasing in importance with increasing complexity of instruments. Armed Forces training valuable. Few Federal Government programs. High school graduation. Need courses in alebra, trigonometry, physics, chemistry, electronics, machine shop, blueprint reading. Mechanical aptitude. Good eye-hand coordination, finger dexterity. Work without close supervision.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Jewelers	Informal on-the-job training or formal apprenticeship programs. Jewelry factories typically provide best training opportunities. High school education desirable, with courses in chemistry, mechanical drawing, and art being particularly useful. Need good finger and hand dexterity, good eye-hand coordination, patience, concentration. Often must be bonded	Largely replacements
Locksmiths	Primarily on-the-job training. Mechanical aptitude, good eye-hand coordination, good/neat appearance/personality; tactful manner; manual dexterity. High school graduation helpful, as are courses in machine shop, mechanical drawing, and mathematics. Also completion of correspondence course, e.g., quite helpful. No criminal record. License sometimes required. Need to engage in continuing education.	Largely replacements, but some moderate increases
Maintenance Electricians	On-the-job or formal apprenticeship programs available. Should have courses in mathematics (algebra, trigonometry especially), basic science. Continuing education important. Manual dexterity, good color vision, agility, good health. Need license.	Moderate increase
Motorcycle Mechanics	Usually on-the-job training, largely informal or as helpers; need own hand tools. Preferred are cycling enthusiasts with practical experience as repairmen; need motorcycle driver's license. High school graduation preferable as well, with such background courses as auto mechanics, science, mathematics, good mechanical aptitude, manual and finger dexterity.	Rapid growth, but still few openings
Piano & Organ Servicemen	Generally on-the-job learning, typically as helpers. Need good hearing, mechanical aptitude, manual dexterity, neat appearance, pleasant personality; for organ, need normal eyesight; ability to play not essential, but helps. High school graduates preferred, with music courses helping develop ear for tonal quality. Courses in woodwork may also be useful, some variations depending upon specific type of repair.	Largely replacements
Shoe Repairmen	Generally hired as helpers and acquire skills through informal on-the-job training, with some learning through vocational school training. Much standing on feet, need good health, good eye-hand coordination, and for those developing independent business operations, need business administration and salesmen qualities.	Slow decline, with number of replacements expected

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Television & Radio Service Technicians	Electronic training required, with technical, vocational, or high school training in electronics, mathematics, physics providing good entry background, as well as military experience, correspondence school courses in appropriate areas. Need to keep up-to-date Some Federal Government training programs (although incomplete) available. Interested persons can enhance assets through taking trade/correspondence/vocational schools in automatic controls, electronic engineering, television engineering, and mathematics.	Moderate increase
Truck Mechanics & Bus Mechanics	Typically skills learned on-the-job. Four-year apprenticeship program typically recommended as being preferred however. Some Federal Government training programs available. Need mechanical aptitude, at least 18 years of age, in good physical condition, et cetera, with high school graduation being definite asset. Science and mathematics in background important, and diesel repair and similar courses asset, as is prior experience in working in a service station. Some Armed Forces training valuable, if within appropriate area.	Rapid increase
Vending Machine Mechanics	Generally enter as general shop helpers, with those showing promise being promoted to trainees. High school graduation not required, but helpful, as are courses in electricity, refrigeration, and machine shop repair. Should demonstrate mechanical ability, tactfulness, have driving license, neat, courteous, et cetera.	Rapid increase
Watch Repairmen	Generally learned in variety of ways, through training in private watch shops or repair centers, public vocational high schools, formal apprenticeship or on-the-job training programs. Typically no specific educational requirements, with some states, however, requiring license. Should have significant patience, visual depth perception, ability to sit still for long periods of time, work with minimum of supervision.	Largely replacements
HEALTH OCCUPATIONS		
Dental Occupations		
Dentists	License required, including graduation from approved dental school. Need manual skills, high level of intelligence, good visual memory, excellent judgment of space and shape, delicacy of touch, high degree of manual dexterity and scientific ability, ability to instill confidence, self-discipline, good business sense.	Very favorable, supply probabl less than demand.

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Dental Assistants	Most learn on-the-job, but increasing number learning through formal training programs. Need at least high school graduation. Typing also helpful. Should have good or neat appearance, work well under direct supervision, and, in addition, be able to work independently where called upon to do so, have pleasant personality, good physical condition and be able to stand upon feet, cleanliness highly important, tactfulness, also helps to be able to assist with clerical and accounting duties, including completion of forms required for third-party payments. Good voice for telephone.	Rapid increase
Dental Hygienists	Need license. Need to complete two-year postsecondary course to work in private dentist's office, and generally four-year to engage in research, teaching, working in public or school health programs. Courses concentrated largely in basic and dental sciences, and liberal arts. Get laboratory work, clinical experience, classroom instruction, in subjects such as anatomy, chemistry, histology, pathology, pharmacology, nutrition.	Very favorable, especially for older women
Dental Laboratory Technicians	High school diploma generally an asset, with most learning on-the-job. Some few public vocational high schools offer helpful programs. ADA-accredited two-year courses offered in about 33 institutions. Can become Certified Dental Technicians.	Rapid growth
MEDICAL PRACTITIONERS		
Chiropractors	Must be licensed. About 10 chiropractic colleges which generally require two years of college prior to entrance, with some specifying particular required courses. The D. C. degree is awarded at end of satisfactory training period. Considerable hand dexterity, ability to work independently, handle responsibility well, work with detail, need sympathy and understanding.	Generally favorable, but largely replacements
Optometrists	License required, including prior acquisition of Doctor of Optometry mandatory. Minimum of six years training in higher education, including four year professional degree program. Generally self-employed so need ability to deal with people, good business sense, et cetera.	Favorable, largely replacements
Osteopathic Physicians	Need license. About 3 years of preosteopathic college work is minimum for entering training program leading to D. O. Internship almost always required, with additional training for specialty. Must have strong desire to practice osteopathic principles of healing, keen sense of touch, emotional stability, self-confidence, friendliness, patience, good ability to deal with people, et cetera.	Generally good, largely replacements

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Physicians	License required. Most medical schools require at least completion of three undergraduate years, some four undergraudate years, including courses in English, physics, biology, inorganic and organic chemistry. Need courses in humanities, mathematics, social sciences, for broad educational background. Considered are one's college record and MCAT scores for admission. Also applicant's character, personality, leadership qualities. Need strong desire to serve the sick and injured, need to continue education (keep up), very exacting science, demands adherence to high moral standards, sincerity, pleasant personality, emotional stability, ability to make decisions in emergency or under pressure, et cetera.	Variable, depending upon certain other developments w/i this and related fields, including federal health insurance programs.*
Podiatrists	License required. Need to gain admission currently to one of the 5 colleges of podiatric medicine, which admit only students with at least two years of completed college, indlucing subjects in English, chemistry, biology, zoology, physics, mathematics. Obtain D.P.M. Need scientific aptitude, manual dexterity, like detailed work, have good business sense, congeniality, sense of responsibility.	Should be favorable, given especially podiatric care available under Medicare.*
Veterinarians	License required, with minimum degree being V.M.D. or D.V.M., with additional training needed for further specialization, research, teaching, et cetera. Need to have scientific aptitude, patience, interest in detailed work, et cetera.	Very favorable, rapid increase
MEDICAL TECHNICIAN, TECHNOLOGIST, AND ASSISTANT OCCUPATIONS		
Electrocardiograph Technicians	EKG technicians generally trained on-the-job, with minimum prerequisite being high school graduate. Typing and familiarity with medical terminology very helpful. Military services provide some training if in that area. Need mechanical aptitude, ability to follow detailed instructions, calm presence of mind in emergency situations, common sense, reliability, patience.	Rapid increase
Electroencephalographic Technicians	EEG generally trained on-the-job, but sophistication of equipment leading to need for more formalized training modality, and various programs available through different educational institutions. ABRET registration helpful. Need manual dexterity, good vision, aptitude for working with electronic equipment, ability to work with patients and as member of medical team.	Rapid growth

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Medical Assistants	Often training received on job, but growing number receiving training from post-secondary sources. Need background in mathematics, sciences, and office practices, et cetera. Can continue education and experience career upward mobility. Need good personality, et cetera, characteristics similar to others within helping professions, but must be able to work well under direct supervision.	Rapid growth, with favorable outlook for graduates of junior college programs
Medical Laboratory Workers	Usually need college degree, including completion of specialized program in medical technology. Requires broad understanding of scientific principles underlying laboratory work. Assistants often receive on-the-job training if meet other prerequisites, but must be at least high school graduates, and increasing emphasis being placed upon their training in postsecondary settings, such as junior colleges. Accuracy, dependability, ability to work under pressure are all important, as are manual dexterity, accurate color vision, and similar traits.	Moderate expansion
Medical Record Technicians & Clerks	Generally positions filled from graduates of college or hospital-based programs accredited by AMA and AMRA. High school graduates w/ basic secretarial skills can enter field as beginning record clerks, with some on-the-job training. Helpful are courses in Latin, biology, chemistry, business subjects. Should be accurate, pay attention to details, and able to avoid unwarranted discussion or disclosure of data.	Rapid growth
Operating Room Technicians	Generally trained on-the-job, with high school education or equivalent, with preferences often given to those with prior experience as nurse aides or practical nurses. Classroom training also available at number of private/public junior/vocational schools. Need courses in anatomy, physiology, microbiology, as well as practical application courses, such as care and safety of patients during surgery, use of anesthesia and its hazards, and nursing procedures. Manual dexterity required. Must be orderly, neat, emotionally stable.	Excellent, preferably for graduates of junior colleges
Optometric Assistants	Generally on-the-job training in employer's office. Can obtain some training formally, including through several academic programs. Need high school diploma, courses in mathematics and office procedures as assets. Manual dexterity. Accuracy. Ability to distinguish shades of color. Good appearance, courteous behavior, tact.	Rapid increase

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Radiologic (X-Ray) Technologists	Must complete formal training program in X-ray technology, available through many hospitals, medical schools (affiliated w/ colleges of all types), as well as in military service. Only high school graduates accepted, with courses in mathematics, physics, chemistry, biology, typing helpful. Need good health and stamina, as well as pleasant personality, which enhances contact with X-Ray patients.	Rapid increase expected
Respiratory Therapists	Formalized training now stressed, with more than 100 institutions offering programs. Must be high school graduate. Must be able to work with patients and understand physical and psychological needs. Attention to detail critical, as are following instructions, and working as team member. Need some mechanical ability.	Rapid increase
NURSING OCCUPATIONS		
Registered Nurses	Need license, must graduate from approved school by State and pass examination. Need doctoral study for most positions in research, consultation, teaching, clinical specialization. Should have sincere desire to serve humanity, sympathy to needs of others, ability to follow orders of others precisely, use good judgment in emergencies, able to accept responsibility and direct or supervision of others, good mental health, physical stamina, et cetera.	Generally good, with more favorable opportunities for those with more education and specialization.
Licensed Practical Nurses	License required, which prior completion of approved course in practical nursing. Need qualities of nurses generally, with emphasis upon ability to take and follow orders and supervision.	Rapid increase
Nursing Aides, Orderlies & Attendants	Generally trained on-the-job, with no specific educational qualifications, or with variable qualifications, as is true with age, with nursing homes, et cetera, tending to prefer more mature persons. Helpful are courses offered by various community agencies, volunteer and summer work. Need good health, genuine desire to help others, ability to follow directions and work under supervision and as team member, and significant ability to perform menial tasks.	Rapid increase
THERAPY & REHABILITATION OCCUPATIONS		
Occupational Therapists	Degree or certification required, with graduate degree required for research, teaching, administration. Need emotional stability, sympathetic but objective viewpoints toward illness and disability. Ingenuity, imagination, ability to teach.	Largely replacements in some geographical areas, rapid growth in others

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Occupational Therapy Assistants	Many receive on-the-job training, but increasing number learning their skills in formal postsecondary educational settings. Must be high school graduate or equivalent. Preference given to those w/ courses in science and crafts, and with previous experience as nursing aides. Should sincerely like people, have good physical and mental health, be able to establish and maintain effective personal relationships, enjoy and work well with hands, et cetera.	Very favorable
Physical Therapists	License required. Need degree in physical therapy, with opportunities improving with increasing education. Should have significant patience, tact, resourcefulness, emotional stability, manual dexterity, physical stamina, and good personal qualifications. Can gain experience and determine interest through summer or volunteer positions.	Largely replacement
Physical Therapist Assistants & Aides	Moving toward licensing of those with some postsecondary training. Can receive training in on-the-job settings in hospitals and other health-care facilities. Should be at least high school graduate. Science courses and previous experience as nurses' aides helpful. Need good physical health and stamina, manual dexterity, body coordination, sincere interest in patients.	Generally rapid growth
Speech Pathologists & Audiologists	Increasingly moving toward requirement of at least master's degree. Often teacher's certificate also required. Need undergraduate courses in such areas as anatomy, biology, physiology, physics, linguistics, semantics, and phonetics, with those in speech and hearing, child psychology, psychology of the exceptional child also being very helpful. Should like people. Have ability to approach problems objectively. Sensitive, patient, emotionally stable. Able to accept responsibility. Word independently. Direct others. Ability to work with detail very important.	Moderate increase
OTHER HEALTH OCCUPATIONS		
Dietitians	Basic educational requirement is bachelor's degree, preferably with a major in foods and nutrition or institutional management. Professional recognition desirable through ADA. Need good organizational and administrative ability for advancement, as well as high scientific aptitude, ability to work well w/ variety of people.	Rapid growth anticipated

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Hospital Administrators	Educational qualifications vary, with most preferring applicants w/ at least a master's degree in hospital administration, although some prefer formal training in social/behavioral sciences, industrial engineering, or business administration, along with experience in health field. A few require physicians or registered professional nurses. Need initiative and interest in community service, as well as organizational and supervisory skills. Must be able to speak well in public.	Very favorable, especially for those with post-collegiate training and experience
Medical Record Administrators	Generally need at least bachelor's degree in medical record administration, and helpful is prior experience gained through summer/volunteer employment. Must be accurate, interested in detail; able to communicate clearly in oral and written ways; et cetera.	Rapid increase
Pharmacists	License required, with prior graduation from accredited pharmacy college, and passage of State board examination; need at least 5 years of study beyond high school. Typically need good business acumen, as well as interest in medical science, ability to instill confidence in patients, honesty, integrity, orderliness, accuracy.	Moderate growth
Sanitarians	Bachelor's degree usually minimum educational requirement, with such individuals typically receiving supervision at trainee level and other on-the-job training from experienced sanitarians. Should like working with detail, possess a mechanical aptitude. Effective communication. Tactfulness.	Rapid increase
SOCIAL SCIENTISTS		
Anthropologists	Should obtain Ph. D.. Some training in archeology, linguistics, and physical and cultural anthropology. Mathematics very helpful. Above average interest in natural history or social studies. Enjoy teaching, reading, research, and writing, have a desire to travel and ability to cope with disadvantages of remote work areas are sometimes necessary for success. Need ability to work with detail and independently.	Rapid increase, but few places of employment

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Economists	Need thorough understanding of economic theory and methods of economic analysis. Basic statistical procedures also generally not only helpful but often necessary. Many beginning research jobs in government need only bachelor's in Economics, but graduate training important for those who wish to become economists. Should be able to work accurately and in detail, and often as part of team. Must be objective in work, good communicationists.	Not very good, with supply greater than demand Keen competition on doctoral level
Historians	Graduate education usually needed for employment as historian, although some with bachelor's can get beginning government jobs (but not recognized as historians). Need training in history topics, research, writing, speaking. Quantitative methods of analyses becoming increasingly important. Should be able to work independently and as part of group.	Moderate growth, but keen competition for doctorates
Geographers	Educational requirement usually a bachelor's degree with a major in geography. Ph. d. preferred for research and teaching. Should enjoy reading, studying, and research, working with abstract ideas and theories, as well as doing practical studies, should be able to work independently, communicate ideas effectively.	Very favorable for doctorates, with competition expected for master's, and some employment opportunities, especially in government and secondary schools expected to increase.
Political Scientists	Graduate training generally required, especially Ph. D. for teaching although master's degree is helpful for some administrative and reresearch positions in government, non-profit, and civic organizations. Should like to work with details. Be objective and able to work independently or as member of team. Communication important.	Moderate increase, but stiff competition
Sociologists	Minimum requirement is usually a master's degree and a major in Sociology. Ph. D. essential for attaining a professorship in most colleges or universities. Also commonly required for directors of major research projects, important administrative positions, or consultants. Those with master's degree, trained in research and statistical and computer methods can qualify for many administrative and research positions. Advancement gained through experience. Bachelor's degree holders usually not recognized as sociologists, but can get some jobs as interviewers or research assistants, case workers, et cetera. With sufficient training, positions as statisticians also available. Choice of graduate school important for persons wishing to become sociologists. Should select schools emphasizing training in research, statistical, and computer methods. Effective communication. Group and independent work.	Favorable for those with Ph. D., with some competition for those seeking choice positions. Master's--considerable competition. Rapid growth.

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK**
COUNSELING OCCUPATIONS		
School Counselors	Counseling and teaching certificates generally required, often w/ graduate training and experience. Should take as undergraduates regular teacher education program, along with courses in Sociology and Psychology. Sometimes liberal arts programs substituted or accepted. Need graduate-level courses in such areas as appraisal of individual student, individual counseling procedures, group guidance, information services for career development, professional relations and ethics, and statistics and research. Need to have have ability to help others accept personal responsibility, able to coordinate activities of others and work as part of team.	Moderate growth, heavily dependent upon such factors as continuation of Federal Government's Career Educati program, principally design for children. Otherwise, largely replacements.
Employment Counselors	First-level employment counselors in State employment service offices must have 30 graduate semester hours of counseling courses beyond bachelor's degree, although one year of counseling-related experience may be substituted for 15 graduate semester hours. Various majors or experience required, but college students in preparation for such courses in Sociology and Psychology. Graduate level courses should include techniques of counseling, psychological principles of psychology of careers, assessment and appraisal, cultures and environment, and occupational information. Should have strong interest in helping others make vocational plans and carry them out, ability to work independently, and keep detailed records.	Probably favorable, certainl replacements
Rehabilitation Counselors	Minimum educational requirement is bachelor's degree with courses in counseling, psychology, and related fields, with increasing emphasis being put on graduate training in rehabilitation and related areas. Must be able to accept responsibility, work independently and cooperatively, able to motivate and guide others.	Favorable

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
College Career Planning and Placement Counselors	At least a bachelor's degree, preferably in Psychology or Sociology, with master's degree being increasingly stressed. Need interest in people, good communicative skills, able to gain confidence of students, faculty, administrators, energetic, able to work under pressure.	Moderate growth
CLERGYMEN		
Protestant Ministers	Considerable variation in entry requirements. Accredited theological courses emphasize Biblical, historical, theological, and practical areas, with increasing emphasis also being placed upon psychology, religious education, and administration.	Largely replacements
Rabbis	Must complete the prescribed course of study.	Demand considerably greater than supply
Roman Catholic Priests	8 years of study beyond high school required in the more than 450 seminaries offering such training. Must meet entrance requirements.	Growing number needed
OTHER SOCIAL SERVICE OCCUPATIONS		
Cooperative Extension Service Workers	Must have at least bachelor's in subject-matter field, and training in educational techniques desirable.	Continued growth expected
Home Economists	Need at least bachelor's degree and increasing education becoming more important. Must be able to work with various types of persons and have capacity for leadership. Need good grooming, poise, interest in persons. Good public speaking ability, and other communicative skills.	Good for doctoral holders, but competition for others
Psychologists	Generally at least master's degree is minimum educational requirement for professional employment. Ph. D. needed on many levels. Should be emotionally stable, mature, and able to deal effectively with people. Sensitivity, patience, and a genuine interest in others needed. Able to do detailed and independent work. Verbal and writing skills.	Good
Recreation Workers	At least a high school education, and increasingly more education required. Need ability to motivate people, sensitive to their needs. Good health and physical stamina. Creativeness and resourcefulness. Accept responsibility and exercise good judgment. Good leadership skills and understanding of people. Can get prior experience through summer/volunteer jobs.	Excellent, rapid growth

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Social Service Aides	High school graduation generally not required; most highly skilled applicants generally not sought. Need for work and potential for upgrading skills and making a useful contribution to the agency often considered. Should get along well w/ others and have ability to work as team member. Tactful, courteous, possess leadership qualities. Homemaker aides should be housewives and mothers who have demonstrated competence in managing a home and rearing children. On-the-job training usually available.	Rapid
Social Workers	Bachelor's degree, preferably in social welfare or social work, is minimum requirement, with master's required for certain specialized positions. Should be emotionally mature, objective, sensitive, possess basic concern for people and their social problems. Must be able to handle responsibility and work independently, form and sustain good working relationships, and encourage social adjustment in others. Should obtain related work experience while still high school and college student.	Favorable, with good prospects for part-time work for women
ART, DESIGN, AND COMMUNICATIONS RELATED OCCUPATIONS		
PERFORMING ARTISTS		
Actors & Actresses	Formal training is increasingly necessary, and can be obtained at special schools of dramatics arts (chiefly located in New York). Need patience, total commitment, often must travel. Good physical condition and stamina. Poise, stage presence, aggressiveness. Must be able to follow directions. Have good memory.	Largely replacements, overcrowded field
Dancers	Serious training begins at least by age 12. College education is advantageous in obtaining employment for those seeking to teach professional dancing and in choreography. Rigorous practice and self-discipline required. Good health, physical stamina. Good feet, normal arches. Natural aptitude. Creative ability. Need to function well with a team.	Limited, probable decline

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Musicians	Generally begin studying at very early age. Need great technical skill, thorough knowledge of music, know how to interpret music. Jazz and popular music: need understanding of and feeling for that style, but skill and training could expand their employment opportunities. Need musical talent, creative ability, poise, stage presence, self-discpline, physical stamina.	Overcrowded, keen competition
Singers	Need broad background in music, including theory and history. Ability to dance or act may be helpful. Great determination. Creativity. Resourcefulness. Patience. Outstanding personality. Good appearance. Often, good contacts and good luck. Physical stamina.	Overcrowded, keen competition but some growth expected
DESIGN OCCUPATIONS Architects	License required. Generally graduation from accredited architectural school, with three years of internship, or some combination of internship and further education. Work independently. Capacity for solving technical problems. Inclined toward artistic creation. Work in competitive environment of business. Interested in social sciences and strong desire to serve public. Can gain experience while student during summer--also voluntary.	Good
Commercial Artists	Most widely accepted training is instruction given in art schools or institutes specializing in commercial and applied art. Usually need high school education, often acceptable work samples. On-the-job training offered employees with sufficient entrance requirements. Portfolio essential in obtaining employment and freelance assignments.	Good for well-trained persons
Displaymen (Retail Trade)	Largely learn informally, on-the-job training. High school graduation typically required. Creative ability, manual dexterity, and mechanical aptitude, good physical condition, agility.	Moderate increase
Floral Designers	Generally trained on-the-job. Hired as helpers. Need good color vision, manual dexterity, artistic sense of balance in line and color. legible handwriting, knowledge of simple arithmetic, and can get some courses through correspondence, junior/vocational schools. Courses in business arithmetic, salesmanship, and other business subjects helpful. Can get experience through summer or vacation or part-time employment while a student.	Rapid

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Newspaper Reporters	Generally only applicants with at least college education considered. Graduate work increasingly important. Preferences often given to individuals with major in journalism, and, increasingly to individuals with that, plus specialized training. Extremely talented writers always in demand. Desired background includes courses in English, Sociology, Political Science, Economics, History, Psychology, Speech, and ability to read and speak some foreign language. Considerable responsibility involved. Opportunity for self-expression, and also for team participation.	Generally favorable for those with exceptional writing talents; otherwise, competition.
Radio & Television Accnouncers	Need pleasant and well-controlled voice, good sense of timing, excellent pronunciation. Correct English usage and knowledge of dramatics, sports, music, and current events very helpful. Most successful have good personalities, good showmanship, good background knowledge. High school courses in English, public speaking, dramatics, and foreign languages, plus sports and music hobbies, are valuable assets. Number of vocational schools have training programs. Easier to break into radio than television.	Moderate increase
Technical Writers	Generally need at least bachelor's degree, although some talented writers have less. Preferecne often given to applicants with degrees in engineering or science who have had courses in writing. Others seek graduates who majored in Journalism or English, and who have taken some technical courses. Need a knowledge of science and technology and good writing skills. Should think logically, like to do detailed and accurate work; be able to work and talk with others, or work alone with little or no supervision, must be able to accept responsibility, like working on ideas, and seeing results of work.	Moderate increase

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*Source: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1974-75 Edition, Bulletin 1785. U. S. Government Printing Office, Washington, D. C., 1974.

**This section on Qualifications contains information for specific occupations abstracted from the Handbook sections on "Training, Other Qualifications, and Advancement." One aspect stressed throughout the Handbook was the need to be aware of types of training, inasmuch as many occupations require training which should be begun early within the high school period.

OCCUPATION	QUALIFICATIONS**	EMPLOYMENT OUTLOOK***
Urban Planners	Generally need advanced training in urban planning, such as two years of graduate study in city planning, or the equivalent in study and work experience. Some beginning positions available to persons with bachelor's degrees in such areas as landscape architecture, city planning, architecture, and engineering. Frequently must pass civil service examintions for government positions. Should be able to think in terms of spatial relationships and to visualize the effects of their plans and designs. Should be flexible in approaches to problems. Have to cooperate with others, reconcile different viewpoints to achieved desired ends.	Very good
COMMUNICATIONS RELATED OCCUPATIONS Interpreters	Need a complete command of two+ languages at least; should be able to call to mind instantaneously words or idioms coresponding to the foreign ones, need extensive working vocabulary and absolute ease in making translation. Should acquire expertise in several languages. UN interpreters must know at least three of the five official UN languages (English, French, Spanish, Russian, Chinese). Interpreter training programs of high quality available at primarily two institutions in U. S., The Georgetown University School of Languages and Linguistics in D. C., and the Monterey Institute of Foreign Studies in California, and both require foreign language proficiency prior to entry. Should be generally well-informed on broad range of subjects, including many technical ones; university education thus usually considered essential. Should be articulate speakers with good hearing, good emotional stamina, quickness, alertness, and constant attention to detail. Must have good sense and tact. Must maintain confidentiality in work, give honest interpretations.	Stable, largely replacements

***Although it is quite evident that predictions about precise employment outlooks suffer from inaccuracies due to a variety of reasons, and that particular individuals with given interests and abilities for specific career routes should generally not be discouraged from pursuing those routes within reason, the Employment Outlook Section in the Handbook is very helpful for our purposes, because it provides some suggestions about the types of training modalities, as they relate to job opportunities, which would be more feasible for grouping training programs for black women. According to the Handbook (p. 7), "The keys to understanding the outlook statements are the economic assumptions used in developing projections of future needs. One of the assumptions...is that high employment levels will be maintained and that no cataclysmic events will occur, such as a war or a severe and prolonged economic depression....In making employment projections, all possible factors should be taken into account. Nevertheless, not all factors can be quantified or themselves projected....outlook information in the Handbook is generally presented as a qualitative statement about growth in an occupation. Opportunities will usually be favorable if employment in occupations increases over time along with the growth of the economy; those occupations that are expected to remain constant or decline generally have less favorable prospects than does the average occupation. " The various interpretations which the Handbook sets forth for specific key adjectives describing outlook are as follows: a very rapid increase is 40+ percent, and decline, -40+ percent; rapid increase = 30.0 - 39.9 percent, with decline = -30.0 to -39.9 percent; moderate increase = 15.0 to 29.9 percent, decrease = -15.0 to -29.9 percent; slow = 5.0 to 14.9 percent for increase, and -5.0 to -14.9 percent for decrease;, while little or no change = 0 to 4.9 percent for increase, and 0 to -4.9 percent for decrease. In terms of prospective demand-supply relationships, job opportunities are viewed as excellent if the demand is much greater than the supply; very good if the demand is greater than the supply, good or favorable if there is a rough balance between demand and supply; may face competition if the likelihood is of more supply than demand; and keen competition is the supply is greater than the demand.